CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM

REEVALUATION

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NEW YORK CITY DOT

Table of Contents

Executive Summary....1
1 Introduction....1
2 Project Description: Adopted Toll Structure....20
3 Analysis Framework: General Methodology for Reevaluation....27
4A Transportation – Regional Transportation Effects and Modeling....28
METHODOLOGY....28
ANALYSIS AND RESULTS....29
FINDINGS....29
4B Transportation – Highways and Local Intersections....31
METHODOLOGY....31
ANALYSIS AND RESULTS....33
FINDINGS....37
4C Transportation – Transit....39
METHODOLOGY....39
ANALYSIS AND RESULTS....41
FINDINGS....46
4D Transportation – Parking....52
METHODOLOGY....52
ANALYSIS AND RESULTS....52
FINDINGS....55
4E Transportation – Pedestrians and Bicycles....57
METHODOLOGY....57
ANALYSIS AND RESULTS....58
FINDINGS....66
5 Social Conditions: Population Characteristics and Community Cohesion (EA Subchapter 5A), Neighborhood Character (EA Subchapter 5B), and Public Policy (EA Subchapter 5C)....68
METHODOLOGY....68
ANALYSIS AND RESULTS....68
FINDINGS....71
6 Economic Conditions....74
METHODOLOGY....74
ANALYSIS AND RESULTS....74
FINDINGS....81
Other Analyses: Parks and Recreational Resources (EA Chapter 7), Historic and Cultural Resources (EA Chapter 8), Visual Resources (EA Chapter 9)....84
FINDINGS....84
10 Air Quality....86
METHODOLOGY....86
ANALYSIS AND RESULTS....89
FINDINGS....101

11 Energy 106
METHODOLOGY 106
ANALYSIS AND RESULTS 106
FINDINGS 107

12 Noise 109
METHODOLOGY 109
ANALYSIS AND RESULTS 110
FINDINGS 113

Other Analyses: Natural Resources (EA Chapter 13), Hazardous Wastes (EA Chapter 14), Construction Effects (EA Chapter 15) 116
FINDINGS 116

16 Summary of Effects 118

17 Environmental Justice 119
METHODOLOGY 119
ANALYSIS AND RESULTS: LOCAL (NEIGHBORHOOD) EFFECTS 119
ANALYSIS AND RESULTS: REGIONAL 120
ANALYSIS AND RESULTS: LOCAL (NEIGHBORHOOD) EFFECTS RELATED TO TRAFFIC DIVERSIONS 125
FINDINGS 162

18 Agency Coordination and Public Participation 168
FINAL EA AND FONSI COMMITMENTS 168
OTHER OUTREACH AND COORDINATION 172

19 Section 4(f) Evaluation 173
FINDINGS 173

Other Analyses: Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity (EA Chapter 20), Irreversible and Irretrievable Commitment of Resources (EA Chapter 21) 174

Conclusion 175

Abbreviations, Acronyms, and Initialisms

AADT ..... Annual Average Daily Traffic
AASHTO ..... Association of State Highway and Transportation Officials
ACM ..... Asbestos-Containing Materials
ACS ..... American Community Survey
ADA ..... Americans with Disabilities Act
APE ..... Area of Potential Effects
ATR ..... Automatic Traffic Recorder
AVE ..... Area of Visual Effect
BID ..... Central Business District
BPM ..... Best Practice Model
BQE ..... Brooklyn-Queens Expressway
Btu ..... British thermal units
CAA ..... Clean Air Act
CBD ..... Central Business District
CDC ..... Centers for Disease Control and Prevention
CEQR ..... City Environmental Quality Review
CFR ..... Code of Federal Regulations
CH_4 ..... Methane
CHASP ..... Construction Health and Safety Plan
CMAQ ..... Congestion Mitigation and Air Quality Improvement Program
CO ..... Carbon Monoxide
CO_2 ..... Carbon Dioxide
CO_2e ..... CO_2 Equivalents
CRIS ..... Cultural Resource Information System
CRP ..... Carbon Reduction Program
CTPP ..... Census Transportation Planning Package
dB(A) ..... A-weighted decibels
DMV ..... New York City Department of Motor Vehicles
DOHMH ..... New York City Department of Health and Mental Hygiene
EA ..... Environmental Assessment
ECL ..... Environmental Conservation Law
EFH ..... Essential Fish Habitat
EIS ..... Environmental Impact Statement
EJCG ..... Environmental Justice Community Group
EPA ..... U.S. Environmental Protection Agency
ESA ..... Endangered Species Act
ESA ..... East Side Access
FCA ..... Fare Control Area
FDR Drive ..... Franklin D. Roosevelt Drive
FHV ..... For-Hire Vehicle
FHWA ..... Federal Highway Administration
FONSI ..... Finding of No Significant Impact
fpm ..... feet per minute
GHG ..... Greenhouse Gas

GWBBS .....George Washington Bridge Bus Station
GWP .....Global Warming Potential
HCS .....Highway Capacity Software
HEI .....Health Effects Institute
HEET .....High Entry/Exit Turnstile
HOT .....High-Occupancy Toll
HOV .....High-Occupancy Vehicle
HVFHS .....high-volume for-hire services
JFK Airport .....John F. Kennedy Airport
L .....left turn
LEP .....Limited English Proficiency
LIRR .....Long Island Rail Road
LN .....Late Night
LOS .....Level of Service
LPC .....New York City Landmarks Preservation Commission
LWCFA .....Land and Water Conservation Fund Act
MD .....Midday
Metro-North or MNR .....Metro-North Railroad
MOU .....Memorandum of Understanding
MOVES .....(USEPA) Motor Vehicle Emission Simulator
mph .....miles per hour
MPO .....Metropolitan Planning Organization
MSAT .....Mobile Source Air Toxics
MTA .....Metropolitan Transportation Authority
N_2O .....Nitrous Oxide
NAACP .....National Association of the Advancement of Colored People
NAAQS .....National Ambient Air Quality Standards
NAICS .....North American Industry Classification System
NATA .....National Air Toxics Assessment
NB .....northbound (traffic)
NBL .....northbound left turn (traffic)
NBT .....northbound through (traffic)
NEPA .....National Environmental Policy Act
NHL .....National Historic Landmark
NHPA .....National Historic Preservation Act
NICE .....Nassau Inter-County Express
NJT or NJ TRANSIT .....New Jersey Transit Corporation
NJTPA .....North Jersey Transportation Planning Authority
NMFS .....National Marine Fisheries Service
NO_2 .....Nitrogen Dioxide
NO_x .....Nitrogen Oxides
NPS .....National Park Service
NR .....National Register of Historic Places
NRHP .....National Register of Historic Places
NTP .....Non-Toll Pricing
NWI .....National Wetlands Inventory
NYC .....New York City
NYC Parks .....New York City Department of Parks and Recreation

NYCCAS ..... New York City Community Air Survey
NYCDCP ..... New York City Department of City Planning
NYCDOE ..... New York City Department of Education
NYCDOT ..... New York City Department of Transportation
NYCHD ..... New York City Historic District
NYCL ..... New York City Landmark and New York City Scenic Landmark
NYCRR ..... New York Codes, Rules, and Regulations
NYCT ..... New York City Transit
NYC TLC ..... New York City Traffic and Limousine Commission
NYMTC ..... New York Metropolitan Transportation Council
NYPD ..... New York City Police Department
NYSDEC ..... New York State Department of Environmental Conservation
NYSDOP ..... New York Statewide Digital Orthoimagery Program
NYSDOT ..... New York State Department of Transportation
NYS DTF ..... New York State Department of Taxation and Finance
O_3 ..... Ozone
OSHA ..... Occupational Safety and Health Administration
PABT ..... Port Authority Bus Terminal
PAH ..... Polycyclic Aromatic Hydrocarbon
PANYNJ ..... Port Authority of New York and New Jersey
PATH ..... Port Authority Trans-Hudson
Pb ..... Lead
pc/mi/ln ..... passenger cars per mile per lane (density)
PCB ..... Polychlorinated Biphenyl
PCE ..... Passenger Car Equivalent
PFAC ..... Program, Finance and Administration Committee
$PM_{2.5}$ and PM_{10} ..... Particulate Matter (2.5 microns and 10 microns)
ppb ..... parts per billion
ppm ..... parts per million
R ..... right turn (traffic)
RCNY ..... Rules of the City of New York
RFK Bridge ..... Robert F. Kennedy Bridge
SAPA ..... New York State Administrative Procedure Act
SB ..... southbound (traffic)
SBR ..... southbound right turn (traffic)
SBS ..... Select Bus Service
SBT ..... southbound through (traffic)
SBWG ..... Small Business Working Group
SEQRA ..... State Environmental Quality Review Act
SFP ..... Square Feet per Pedestrian
SHPO ..... State Historic Preservation Office
SIE ..... Staten Island Expressway
SIP ..... State Implementation Plan
SO_2 ..... Sulfur Dioxide
SOC ..... Standard Occupational Classification
T ..... through (traffic)
TAZ ..... Traffic Analysis Zones
TBTA ..... Triborough Bridge and Tunnel Authority

TDM .....Transportation Demand Management
TEM.....The Environmental Manual
TIP.....Transportation Improvement Program
Title VI.....Title VI of the Civil Rights Act of 1964
TLC.....New York City Taxi and Limousine Commission
TMRB .....Traffic Mobility Review Board
TR .....through right turn (traffic)
NICE.....Nassau Inter-County Express
TNM .....FHWA's Traffic Noise Model
TRU .....transport refrigeration unit
UHF.....United Hospital Fund
UPARRA .....Urban Park and Recreation Recovery Act
USACE.....U.S. Army Corps of Engineers
USC .....United States Code
USDOT.....U.S. Department of Transportation
USEPA .....U.S. Environmental Protection Agency
USFWS.....U.S. Fish and Wildlife Service
v/c ratio .....volume-to-capacity ratio
VCE .....Vertical Circulation Element
VIA.....Visual Impact Assessment
VMT.....Vehicle-Miles Traveled
VOC .....Volatile Organic Compound
VPH .....vehicles per hour
VPPP .....Value Pricing Pilot Program
XBL .....Exclusive Bus Lane
WB .....westbound (traffic)
WBL.....westbound left turn (traffic)
WSP .....WSP Global Inc.
WBR .....westbound right turn (traffic)
WBT.....westbound through (traffic)
µg/m^3 .....micrograms per cubic meter of air

Executive Summary

FHWA's reevaluation confirms that the adopted toll structure is within the analysis conducted in the Final Environmental Assessment and does not require additional analysis under the National Environmental Policy Act (NEPA). The Finding of No Significant Impact (FONSI) remains valid.

Background

In June 2023, the Federal Highway Administration (FHWA) found that New York's Central Business District (CBD) Tolling Program (CBDTP), known as Congestion Pricing, "will have no significant impact on the human or natural environment" following an extensive review of CBDTP's potential beneficial and adverse effects and committed mitigation, and documented in the CBDTP Final Environmental Assessment (EA). The review considered a variety of potential tolling structures with different combinations of low-to-high toll rates, crossing credits against the toll for vehicles travelling to the CBD through already-tolled bridges and tunnels, exemptions for certain types of vehicles, and other program features.[1]

Since then, the Triborough Bridge and Tunnel Authority (an affiliate of MTA and doing business as MTA Bridges and Tunnels) has adopted a toll structure, based on a recommendation of an independent advisory body, the Traffic Mobility Review Board, and conducted the required public comment period as part of New York's rate-making State Administrative Procedures Act process.

The purpose of this reevaluation is to make sure that that the effects of MTA's adopted toll structure are consistent with the effects disclosed in the Final EA, and that the mitigation identified in FHWA's Finding of No Significant Impact (FONSI) remains valid. In every category, the effects are consistent with those predicated in the Final EA; importantly, some of the adverse effects no longer occur and many are on the lower end of those disclosed in the Final EA.

The adopted toll structure is in line with the tolling scenarios studied in the Final EA

The parameters of the adopted toll structure fall within the range of tolling scenarios evaluated in the Final EA. In brief, the adopted toll structure includes the following elements:[2]

- Passenger vehicles and passenger-type vehicles with commercial license plates will be charged a $15 peak-period ($3.75 overnight period) E-ZPass toll for entering the CBD, no more than once per day.
- Trucks will be charged a $24 or $36 peak-period ($6 or $9 overnight period) E-ZPass toll for entering the CBD, depending on their size.
- School buses contracted, commuter vans, and buses providing scheduled commuter services open to the public will be exempted from the CBD toll, while other buses will be charged a $24 or $36 peak period ($6 or $9 overnight period) E-ZPass toll for entering the CBD, depending on their type.
- Motorcycles will be charged a $7.50 peak-period ($1.75 overnight period) E-ZPass toll for entering the CBD, no more than once per day.
- Peak-period toll rates will apply during the most congested times of the day—from 5 a.m. to 9 p.m. on weekdays, and from 9 a.m. to 9 p.m. on weekends. Toll rates will be 75 percent lower in the overnight period.
- A tunnel crossing credit against the peak-period CBD toll rate will be provided to vehicles with E-ZPass entering through the Queens-Midtown, Hugh L. Carey, Holland, and Lincoln Tunnels; no tunnel crossing credits will be in effect in the overnight period, when CBD toll rates are already 75 percent lower than in the peak period.

Table 1, below, compares the various elements of the adopted toll structure with the tolling scenarios studied in the Final EA.

Table 1. Tolling Scenarios Evaluated in the Final EA with the Adopted Toll Structure Added

PARAMETER	SCENARIO A Base Plan	SCENARIO B Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes	ADOPTED TOLL STRUCTURE	EXPLANATION OF HOW THE ADOPTED TOLL STRUCTURE FITS WITHIN THE FINAL EA TOLLING SCENARIOS
Time Periods[1]									
Peak: Weekdays	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 10 AM; 4 PM – 8 PM	6 AM – 8 PM	5 AM – 9 PM[2]	Overnight period is the same length as those modeled in the Final EA; exceeds commitment in the Final EA to include "further reduced overnight tolls … from at least 12:00 a.m. to 4:00a.m." by charging overnight tolls between 9p.m. to 5 a.m.; reflects a reduced number of time periods for ease of customer understanding
Peak: Weekends	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	9 AM – 9 PM	
Off Peak: Weekdays	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	10 AM – 4 PM	8 PM – 10 PM	9 PM – 5 AM	
Overnight: Weekdays	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	8 PM – 6 AM	10 PM – 6 AM		
Overnight: Weekends	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	9 PM – 9 AM	
Potential Crossing Credits									
Credit Toward CBD Toll for Tolls Paid at Tunnel Entries	No	No	Yes - Low	Yes - High	Yes - High	Yes - High	No	Yes - Low	Same as Tolling Scenarios C, D, E, & F
Credit Toward CBD Toll for Tolls Paid at Bridges to Manhattan	No	No	No	No	No	Yes - High	No	No	
Potential Exemptions and Limits (Caps) on Number of Tolls per Day[4,5,6]									
Autos, motorcycles, and commercial vans	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Same as all Final EA tolling scenarios
Taxis	No cap	Once per day	Exempt	No cap	Exempt	Once per day	No cap	$1.25 per trip toll on trips to, within, or from the CBD	Final EA commits that "TBTA will ensure that New York City taxis and FHVs are not tolled more than once per day in the adopted CBD toll structure;" per-trip tolls for taxis and FHVs equivalent to commitment of a once-per-day charge (see note 4)
FHVs	No cap	Once per day	Three times per day	No cap	Three times per day	Once per day	No cap	$2.50 per trip toll on trips to, within, or from the CBD	
Small and large trucks	No cap	Twice per day	No cap	No cap	No cap	Once per day	No cap	No cap	Same as Tolling Scenarios A, C, D, E, and G
Buses	No cap	Exempt	No cap	No cap	Transit buses – Exempt No cap on other buses	Exempt	No cap	Certain buses – Exempt (see note 5)	Same as Tolling Scenario E

PARAMETER	SCENARIO A Base Plan	SCENARIO B Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes	ADOPTED TOLL STRUCTURE	EXPLANATION OF HOW THE ADOPTED TOLL STRUCTURE FITS WITHIN THE FINAL EA TOLLING SCENARIOS
Approximate Toll Rate Assumed for Autos, Commercial Vans, and Motorcycles[3]									
Peak	$9	$10	$14	$19	$23	$23	$12	$15	Within the range of $9 - $23
Off Peak	$7	$8	$11	$14	$17	$17	$9	$3.75	Lower than range in the Final EA; closest to Tolling Scenarios A and B at $5; exceeds commitment in the Final EA to include "further reduced overnight tolls at or below 50 percent…" by reducing peak toll by 75 percent
Overnight	$5	$5	$7	$10	$12	$12	$7	$3.75	
Approximate Toll Rate Assumed for Trucks (Small Trucks/Large Trucks)[3]									
Peak	$18 / $28	$20 / $30	$28 / $42	$38 / $57	$46 / $69	$65 / $82	$12 / $12	$24 / $36	Within the range of $12 - $65 (small trucks) / $12 - $82 (large trucks)
Off Peak	$14 / $21	$15 / $23	$21 / $32	$29 / $43	$35 / $52	$49 / $62	$9 / $9		
Overnight	$9 / $14	$10 / $15	$14 / $21	$19 / $29	$23 / $35	$33 / $41	$7 / $7	$6 / $9	Toll rates lower than range of rates presented in the Final EA; exceeds commitment in the Final EA to include "further reduced overnight tolls at or below 50 percent…" by reducing peak toll by 75 percent

Notes:

[1] Tolls would be higher during peak periods when traffic is greatest. All Final EA tolling scenarios and the adopted toll structure include a higher toll on designated "Gridlock Alert" days, although the modeling conducted for the Project does not reflect this higher toll since it considers typical days rather than days with unusually high traffic levels.

[2] The adopted toll structure has a simplified two-time-period structure (i.e., peak and overnight) on weekdays, as opposed to the three-time-period (i.e., peak, off-peak, and overnight) weekday structures studied in the Final EA. As there is no longer an off-peak period on weekdays, the weekday peak and overnight periods are longer than those studied in the Final EA. The transportation modeling conducted for the adopted toll structure accounts for this change in the peak and off-peak periods and thus the model results reflect this change.

[3] Toll rates are for vehicles using E-ZPass and are rounded. For all tolling scenarios, different rates would apply for vehicles not using E-ZPass.

[4] The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber).

[5] The per-trip tolls for taxis and FHVs in the adopted toll structure would be equivalent to the auto peak rate of $15 (based on NYC Taxi and Limousine Commission analysis of trips made by TLC-licensed vehicles in May 2023: for taxis the average number of trips with passengers to/from/within the CBD is 12, and for FHVs it is 6).

[6] With the adopted toll structure, qualifying authorized emergency vehicles and qualifying vehicles transporting people with disabilities would be exempt from the toll. Specialized government vehicles would also be exempt. School buses contracted with the NYC Department of Education, commuter vans licensed with the NYC Taxi and Limousine Commission, and buses providing scheduled commuter services open to the public would also be exempt from the toll.

Environmental justice mitigation commitments

The Final EA approved by FHWA in June 2023 addressed any potential adverse environmental effects from Congestion Pricing by committing to mitigation measures. It also concluded that Congestion Pricing would not have a disproportionately high and adverse effect on environmental justice communities or populations with the commitment to both place-based mitigation measures in potentially impacted environmental justice census tracts, and other mitigation measures designed to benefit the entire region, including low-income drivers. The value of those measures was $207.5M over five years.

The adopted toll structure deepens the value of two of the mitigation measures described in the Final EA. It increased the low-income discount; it also both extended the overnight period beyond the commitment in the Final EA and deepened the overnight discount. With those additions, the total mitigation commitment made by the Project increased, from $207.5M to $330M.

1. Place-based mitigation

The reevaluation reaffirms the commitment to $100M in funding for place-based mitigation to those environmental justice communities that (a) could see increased truck traffic proximity, and that (b) have at least one pollutant burden AND at least one chronic disease burden at or above the 90th percentile compared to the nation as a whole.

The reevaluation confirms that the adopted toll structure will affect the same 13 environmental justice communities as those identified in the Final EA: Crotona–Tremont, High Bridge–Morrisania, Hunts Point-Mott Haven, Northeast Bronx, Pelham–Throgs Neck, Downtown Brooklyn–Fort Greene, South Williamsburg, East Harlem, Randall's Island, Newark, Orange, East Orange and Fort Lee. With the tolling structure now formally adopted, the amount of funding for each mitigation measure has been allocated to the affected EJ communities, in direct proportion with the population within the affected census tracts.

Place-based mitigation measures include:

- $15M to replace diesel-powered Transport Refrigeration Units at Hunts Point Produce Market in the Bronx.
- $20M to establish an asthma center and case management program in the Bronx.
- $20M to implement electric truck charging infrastructure in New York City, which also has regional benefits: although the charging points can only be located in New York State because they are funded by NYSDOT, all trucks may use the charging points regardless of their points of origin or destination.

- $10M to install air filtration units in schools near highways in any of the affected communities regionwide.
- $10M to install roadside vegetation in any of the affected communities regionwide.
- $25M to renovate parks and greenspace in any of the affected communities regionwide.

2. Low-income discount

The adopted toll structure increased the discount available to low-income drivers, regardless of their place of residence, from 25 percent to 50 percent. This mitigation commitment is for a total of $82.0M over five years and will benefit all low-income drivers in the region and beyond.

3. Regional mitigation

The reevaluation reaffirms the mitigation measures made in the Final EA, that have benefits throughout the region. Those measures include:

- $123M to deeply discount the overnight toll so as to reduce diversions and encourage off hours truck deliveries (an increase in both the time period in which the discount is available and the depth of the discount).
- $20M to expand the NYC Clean Trucks Program; participation in the program is open to trucks with more than 70 percent of their vehicle miles traveled in the tri-state area (New York, New Jersey, and Connecticut).
- $5M to expand the NYCDOT Off-Hours Delivery Program; The program is available to all trucks regardless of their points of origin or destination.

Summary of Effects

The reevaluation considers 20 areas of analysis. In 16 of those areas, the reevaluation finds that the Program will benefit communities or create no adverse effects: the regional transportation system, parking, social conditions (in terms of population, neighborhood character, public policy), economic conditions, energy, parks and recreational resources, historic and cultural resources, visual resources; air quality; noise; natural resources; hazardous waste/contaminated materials; and construction effects.

In four areas of analysis, the reevaluation, like the Final EA, found some potential adverse effects: highways and intersections; transit; pedestrian and bicycles. It also considered the potential for disproportionately high and adverse effects on environmental justice communities and populations. The Program includes significant mitigation commitments by the MTA, NYCDOT, and NYSDOT. These include committing $330 million in measures to mitigate the impact that the toll might have on low-income residents and communities across the region, with a special focus on environmental justice communities. The Project Sponsors have also committed to monitoring effects of the Program as it is implemented so that adjustments can be made if warranted (known as adaptive management).

The following tables describe the effects of the adopted toll structure, and compare them to the effects of the seven tolling scenarios analyzed in the Final EA. More detail can be found in Table 1.1 of the reevaluation.

Transportation: Regional Transportation Effects and Modeling

TOPIC	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
Vehicle Volumes	% Increase or decrease in daily vehicles entering the Manhattan CBD relative to No Action Alternative	-15% to -20%	-17%	None
Auto Journeys to CBD	% Increase or decrease in worker auto journeys to Manhattan CBD relative to No Action Alternative	-5% to -11%	-6%	None
Truck Trips Through CBD	% Increase or decrease in daily truck trips through Manhattan CBD (without origin or destination in the CBD) relative to No Action Alternative	-21% to -81%	-55%	None
Transit Journeys	% Increase or decrease in daily Manhattan CBD-related transit journeys relative to No Action Alternative	+1.2% to +2.5%	+1.6%	None
Traffic Results / Manhattan CBD	% Increase or decrease in daily VMT relative to No Action Alternative	-9.2% to -7.1%	-8.9%	None
Traffic Results / NYC non-CBD	% Increase or decrease in daily VMT relative to No Action Alternative	-1.0% to -0.2%	-0.4%	None
Traffic Results / North of NYC	% Increase or decrease in daily VMT relative to No Action Alternative	-0.8% to -0.2%	-0.4%	None
Traffic Results / Long Island	% Increase or decrease in daily VMT relative to No Action Alternative	-0.2% to +0.1%	0.0%	None
Traffic Results / New Jersey	% Increase or decrease in daily VMT relative to No Action Alternative	0.0% to +0.2%	+0.1%	None
Traffic Results / Connecticut	% Increase or decrease in daily VMT relative to No Action Alternative	-0.2% to 0.0%	-0.3%	None

Transportation: Highways and Local Intersections

TOPIC	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	ADDITIONAL MITIGATION NEEDED
Traffic – 10 Highway Segments / AM	0 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D)	1 out of 10 highway corridors (Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel); for some drivers, these increases will be offset by travel time savings within the CBD.	No. Mitigation in Final EA is sufficient.
Traffic – 10 Highway Segments / midday	2 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F	1 out of 10 highway corridors (approaches to westbound George Washington Bridge on I-95); for some drivers, these increases will be offset by travel time savings within the CBD.	No. Mitigation in Final EA is sufficient.
Traffic – 10 Highway Segments / PM	1 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F	1 out of 10 highway corridors (Southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge); for some drivers, these increases will be offset by travel time savings within the CBD.	No. Mitigation in Final EA is sufficient.
Intersections - 4 locations	4 locations in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F	1 location: East 125th Street at Second Avenue (PM)	No. Mitigation in Final EA is sufficient.

Transportation: Transit

TOPIC / TRANSIT RIDERSHIP	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
NYCT subways	% Increase or decrease in total AM peak period boardings systemwide	+1.5% to +2.0%	+1.7%	None. No adverse effects.
PATH		+0.8% to +2.0%	+1.3%	None. No adverse effects.
LIRR		+0.6% to +2.0%	+1.0%	None. No adverse effects.
Metro-North		+0.6% to +1.9%	+1.4%	None. No adverse effects.
NJ TRANSIT commuter rail		+0.3% to +2.3%	+0.9%	None. No adverse effects.
MTA/NYCT buses		+1.2% to +1.6%	+1.3%	None. No adverse effects.
NJTRANSIT Bus		+0.5% to +1.1%	+0.9%	None. No adverse effects.
Other bus		0.0% to +0.9%	+0.2%	None. No adverse effects.
Ferries		+2.5% to +3.6%	+2.9%	None. No adverse effects.
Roosevelt Island Tram		+1.7% to +2.6%	+2.9%	None. No adverse effects.

TOPIC / BUS PASSENGER LOADS	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
Manhattan local bus	% Increase or decrease at maximum passenger load point	+0.5% to +1.2%	+0.5%	None. No adverse effects.
Bronx express bus		-1.6% to +2.2%	+0.6%	None. No adverse effects.
Queens local & express bus via QBB		+2.0% to +2.8%	+2.2%	None. No adverse effects.
Queens express bus via QMT		+0.2% to +1.1%	+0.5%	None. No adverse effects.
Brooklyn local & express bus		+0.6% to +2.6%	+0.5%	None. No adverse effects.
Staten Island express bus via Brooklyn		+3.5% to +4.5%	+3.9%	None. No adverse effects.
Staten Island express bus via NJ		+1.0% to +2.8%	+1.3%	None. No adverse effects.
NJ / West of Hudson bus via Holland Tunnel		-1.4% to +1.4%	+1.9%	None. No adverse effects.
NJ / West of Hudson bus via Lincoln Tunnel		+0.4% to +1.5%	+0.8%	None. No adverse effects.

TOPIC / TRANSIT ELEMENTS	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	ADDITIONAL MITIGATION NEEDED
Hoboken PATH station stair 01/02	Net passenger increases at stair in the peak hour	45 to 240	140	No adverse effect predicted. Mitigation in Final EA will still be implemented, as an enhancement.
42 St-Times Square–subway station (Manhattan) Stair ML6/ML8		40 to 71	43	No. Mitigation in Final EA is sufficient.
Flushing-Main St subway station (Queens)–Escalator E456		40 to 74	61	No. Mitigation in Final EA is sufficient.
Union Sq subway station (Manhattan)–Escalator E219		14 to 23	18	No. Mitigation in Final EA is sufficient.
Court Sq subway station (Queens)–Stair P2/P4		117 to 152	122	No. Mitigation in Final EA is sufficient.

Air Quality

TOPIC / POLLUTANT CONCENTRATIONS ACROSS 12 COUNTIES*	DATA SHOWN IN TABLE	FINAL EA	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
Volatile Organic Compounds (VOC)	% Increase or decrease in criteria pollutants	-0.2%	-0.4%	No
Nitrogen Oxides (NO_x)		-0.4%	-0.5%	
Carbon Monoxide (CO)		-0.3%	-0.7%	
Particulate Matter (PM_{10})		-1.0%	-1.0%	
Particulate Matter ($PM_{2.5}$)		-0.7%	-0.8%	
Carbon Dioxide Equivalents (CO_2e)		-0.6%	-0.6%	

* Bronx, Kings (Brooklyn), New York (Manhattan), Queens, Richmond (Staten Island), Nassau, Suffolk, Putnam, Rockland, and Westchester Counties, New York; Bergen and Hudson Counties, New Jersey.

TOPIC / EMISSIONS "HOT SPOT" ANALYSIS	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIOS	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
Cross Bronx Expressway at Macombs Road, Bronx, NY	Increase or decrease in Annual Average Daily Traffic (AADT)	+1,766 to +3,996 (+1% to +2%)	+3,917 (+2%)	No
	Increase or decrease in daily number of trucks	+50 to +704 (+0% to +3%)	+433 (+2%)	
	Potential adverse air quality effects from truck diversions	No	No, PM_{10} & $PM_{2.5}$ do not exceed NAAQS	
I-95, West of the GWB, Bergen County, NJ	Increase or decrease in AADT	+5,003 to +12,506 (+2% to +5%)	+10,341 (+4%)	No
	Increase or decrease in daily number of trucks	-236 to +955 (-1% to +3%)	+499 (+1%)	
	Potential adverse air quality effects from truck diversions	No	No, PM_{10} & $PM_{2.5}$ do not exceed NAAQS	
RFK Bridge, NY	Increase or decrease in AADT	+18,742 to +21,006 (+13% to +15%)	+20,273 (+14%)	No
	Increase or decrease in daily number of trucks	+432 to +4,116 (+3% to +27%)	+2,433 (+16%)	
	Potential adverse air quality effects from truck diversions	No	No, PM_{10} & $PM_{2.5}$ do not exceed NAAQS	

In addition to the regional and highway "hot spot" analysis, the Final EA and reevaluation assessed the potential effects of emissions from vehicles at 102 intersections across Manhattan, Long Island City, Downtown Brooklyn, and Jersey City near the Holland Tunnel.

All 102 intersections passed screening for air quality effects in both the Final EA and the reevaluation.

Transportation: Parking

Both the Final EA and reevaluation found that CBDTP would have beneficial effects for parking in the CBD since auto trips to the CBD are anticipated to decrease.

Though parking demand at some transit facilities outside the CBD would increase with increased transit ridership, the Final EA and reevaluation found that these increases would be small enough not to generate adverse effects.

Social Conditions

- Access to Employment
  - The vast majority of commuters to the CBD currently use transit.
  - Those who drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD.

  - There would be a negligible effect (less than 0.1 percent) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today.

- Vulnerable Populations
  - Both the Final EA and reevaluation found that CBDTP would benefit vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations, by funding transit improvements and by improving bus travel times and reliability (bus passengers tend to be older than riders on other forms of transit, such as the subway).
  - People over the age of 65 with a qualifying disability are eligible for reduced fare on MTA subways and buses and may also receive MTA's paratransit service, including taxis and for-hire vehicles (FHVs) operating on behalf of MTA.
  - Elderly people with disabilities and low-income individuals who drive to the Manhattan CBD would be entitled to the same mitigation and enhancements proposed for low-income and disabled populations, in general.

Economic Conditions

- The Final EA and reevaluation found economic benefits from CBDTP through travel-time savings and travel-time reliability improvements, as well as reduced vehicle operating costs.
- As found in the Final EA, the adopted toll structure is not anticipated to result in meaningful change in cost for most consumer goods.
- Any cost increase associated with the new toll would be passed along to several business customers, minimizing costs to any individual business.
- No adverse effects were found for any particular industry or sector of the labor force in the Manhattan CBD, including the taxi/FHV industry.
- Transit access in the CBD is high and a high percentage of workers commute by transit; thus, the toll would affect only a small percentage of the overall workforce.
- The potential decrease in taxi/FHV VMT across the region and within the Manhattan CBD under the adopted toll structure is much smaller than the largest potential decreases predicted in the Final EA.

TOPIC / TAXI AND FHV INDUSTRY	DATA SHOWN IN TABLE	FINAL EA	ADOPTED TOLL STRUCTURE	MITIGATION NEEDED
Regionwide	% change in daily taxi/FHV VMT	-5.0% to -0.1%	-0.7%	No; (see "Environmental Justice" for mitigation related to effects on taxi and FHV drivers).
In the Manhattan CBD		-16.8% to +4.6%	-0.3%	

Environmental Justice

- A very small minority of low-income commuters to the CBD drive; many more take transit.
- Low-income drivers to the Manhattan CBD would have increased costs in adopted toll structure, as they would under the scenarios studied in the Final EA; with the adopted toll structure, MTA, NYCDOT, and NYSDOT have committed to a low-income discount that is double what was committed to in the Final EA.
- Taxi and FHV drivers have potential decreases in VMT in the CBD under the adopted toll structure that are smaller than the largest decreases found in the Final EA; this is possible because the adopted toll structure includes per-trip fees that are equivalent to the once-per-day toll cap that the Final EA found would not have, based on detailed data, disproportionately high and adverse effects on taxi/FHV drivers.
- As expected, the census tracts with pre-existing air pollutant and chronic disease burdens that would benefit from reduced traffic, and those affected by increased traffic from vehicles diverting around the CBD, vary somewhat from the Final EA under the adopted toll structure, but the communities remain the same.
- A package of regional and place-based investments, described above, will mitigate these effects.

The adopted toll structure meets the purpose and need of reducing traffic congestion in the CBD, while generating revenue for future transportation improvements

SCREENING CRITERION	CBD TOLLING (ACTION) ALTERNATIVE FINAL EA SCENARIOS	ADOPTED TOLL STRUCTURE
Purpose and Need: Reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements	MEETS	MEETS
Objective 1: Reduce daily vehicle-miles traveled (VMT) within the Manhattan CBD Criterion: Reduce by 5% (relative to No Action)	MEETS	MEETS
Daily VMT reduction (2023)	7.1% - 9.2%	8.9%
Objective 2: Reduce the number of vehicles entering the Manhattan CBD daily Criterion: Reduce by 10% (relative to No Action)	MEETS	MEETS
Daily vehicle reduction (2023)	15.4% - 19.9%	17.3%
Objective 3: Create a funding source for capital improvements and generate sufficient annual net revenues to fund $15 billion for capital projects for MTA's Capital Program	MEETS[1]	MEETS
Net revenue to support MTA's Capital Program[2]	$1.0 billion - $1.5 billion	$0.9 billion
Objective 4: Establish a tolling program consistent with the purposes underlying the New York State legislation entitled the "MTA Reform and Traffic Mobility Act"	MEETS	MEETS

Notes:

1 Although Final EA Tolling Scenario B would not meet Objective 3 with the toll rates identified and assessed in the Final EA, additional analysis was conducted to demonstrate that it would meet this objective with a higher toll rate; the resulting VMT reduction and revenue for that modified scenario would fall within the range of the other Final EA scenarios.

2 The net revenue needed to fund $15 billion depends on a number of economic factors, including but not limited to interest rates and term. For the purposes of the Final EA, the modeling assumes the Project should provide at least $1 billion annually in total net revenue, which would be invested or bonded to generate sufficient funds. The net revenue values provided in this table are rounded and based on Project modeling. Following completion of the Final EA, based on current interest rates and expected timing of projects, MTA's Chief Financial Officer has determined that annual net revenues in the range of $0.9 billion should be sufficient to meet the Project's need to fund $15 billion of capital projects for the MTA Capital Program.

ENDNOTES

1 Federal Highway Administration. June, 2023. "Finding of No Significant Impact: Central Business District (CBD) Tolling Program." Available at https://new.mta.info/document/114186; for more information on the federal environmental review process that led to this Finding, including information on why a federal environmental review was necessary, refer to the "Finding of No Significant Impact (FONSI)" page on the MTA CBD Tolling Program web site at https:/new.mta.info/project/CBDTP/environmental-assessment.

2 For more detail, see the "Congestion Relief Zone, Tolling Information" page at https://congestionreliefzone.mta.info/tolling.

1 Introduction

In June 2023, the Federal Highway Administration (FHWA) issued a Finding of No Significant Impact (FONSI) for the Central Business District (CBD) Tolling Program. The FONSI was based on the April 2023 Final Environmental Assessment (EA), with committed mitigation.

At that time, seven tolling scenarios were presented in the Final EA and FONSI representing a range of toll structures to evaluate their ability to meet the needs of the Project and the resultant environmental effects. The Metropolitan Transportation Authority (MTA) Reform and Traffic Mobility Act (the Act) requires that a Traffic Mobility Review Board (TMRB) be established to recommend a toll structure to the Triborough Bridge and Tunnel Authority (TBTA) Board, in order for the TBTA Board to thereafter propose and adopt a toll structure through a state ratemaking process pursuant to New York's State Administrative Procedure Act (SAPA). Accordingly, the seven tolling scenarios, were developed with different assumptions regarding toll rates, peak periods, and potential discounts, exemptions, and crossing credits, in order to explore and disclose the range of effects that could occur as a result of the CBD Tolling Program. Recognizing that the TMRB could recommend a toll structure that mirrored one of the tolling scenarios, or could recommend different parameters, and that the TBTA Board could choose to adopt a different toll structure, the FONSI contemplated a reevaluation, prepared pursuant to 23 CFR § 771, once the TBTA Board adopted the CBD Tolling Program toll structure.[1]

In November 2023, the TMRB issued a report detailing its tolling recommendations. In accordance with SAPA, the TBTA Board authorized the TMRB's tolling recommendations to be filed in the form of a proposed toll structure, and held a public comment period that included four public hearings. On March 27, 2024, the TBTA Board voted to adopt a final schedule of toll rates as well as associated exemptions, crossing credits, and discounts, referred to in this reevaluation as the "adopted toll structure." The adopted toll structure is the same as recommended by the TMRB with several clarifications incorporated.

The TBTA-adopted toll structure is being reevaluated to determine if the FONSI is still valid. This requires that TBTA demonstrate to FHWA that the effects of the adopted toll structure are consistent with the effects disclosed in the Final EA and that the mitigation is still valid.

The following sections provide the results of analyses conducted for the reevaluation. For ease of comparison, the sections follow the same order for the resource area analyses as the Final EA. Where appropriate, and to provide context, tables with analysis results from the Final EA are provided, side by side with the results of the adopted toll structure.

[1] Federal Highway Administration, *Finding of No Significant Impact, Central Business District (CBD) Tolling Program*, https://new.mta.info/document/114186, p. 26.

Table 1.1 provides a summary of the effects of the adopted toll structure in comparison to the effects presented in the Final EA. The table is a re-creation of the table that was provided in the Final EA as Table ES-5 and Table 16-1, now modified to include the adopted toll structure.

Table 1.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4A – Transportation: Regional Transportation Effects and Modeling	Vehicle Volumes	▪ Decreases in daily vehicle trips to Manhattan CBD overall. ▪ Some diversions to different crossings to Manhattan CBD or around the Manhattan CBD altogether, depending on tolling scenario. As traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD. ▪ Diversions would increase or decrease traffic volumes at local intersections near the Manhattan CBD crossings. ▪ Overall decrease in vehicle-miles traveled (VMT) in the Manhattan CBD and region overall in all tolling scenarios and some shift from vehicle to transit mode.	Crossing locations to Manhattan CBD	% Increase or decrease in daily vehicles entering the Manhattan CBD relative to No Action Alternative	-15%	-16%	-17%	-19%	-20%	-18%	-17%	No	**No mitigation needed.** Beneficial effects	-17%	No	**No mitigation needed.** Same as Final EA
	Auto Journeys to CBD		Manhattan CBD	% Increase or decrease in worker auto journeys to Manhattan CBD relative to No Action Alternative	-5%	-5%	-7%	-9%	-11%	-10%	-6%	No	**No mitigation needed.** Beneficial effects	-6%	No	**No mitigation needed.** Same as Final EA
				Absolute increase or decrease in daily worker auto trips to Manhattan CBD relative to No Action Alternative	-12,571	-12,883	-17,408	-24,017	-27,471	-24,433	-14,578			-16,447		
	Truck Trips Through CBD		Manhattan CBD	Increase or decrease in daily truck trips through Manhattan CBD (without origin or destination in the CBD) relative to No Action Alternative	-4,645 (-55%)	-4,967 (-59%)	-5,253 (-63%)	-5,687 (-68%)	-6,604 (-79%)	-6,784 (-81%)	-1,734 (-21%)	No	**No mitigation needed.** Beneficial effects	-4,627 (-55%)	No	**No mitigation needed.** Same as Final EA
	Transit Journeys		Manhattan CBD	% Increase or decrease in daily Manhattan CBD-related transit journeys relative to No Action Alternative	+1.2%	+1.2%	+1.7%	+2.2%	+2.5%	+2.1%	+1.5%	No	**No mitigation needed.** No adverse effects	+1.6%	No	**No mitigation needed.** Same as Final EA
	Traffic Results		Manhattan CBD	% Increase or decrease in daily VMT relative to No Action Alternative	-7.8%	-7.6%	-8.0%	-8.7%	-9.2%	-7.1%	-8.4%	No	**No mitigation needed.** Beneficial effects in Manhattan CBD, New York City (non-CBD), north of New York City, and Connecticut; although there would be VMT increases in Long Island and New Jersey, the effects would not be adverse.	-8.9%	No	**No mitigation needed.** Same as Final EA
			NYC (non-CBD)		-0.3%	-0.2%	-0.7%	-0.9%	-1.0%	-0.7%	-0.3%			-0.4%		
			NY north of NYC		-0.2%	-0.2%	-0.4%	-0.6%	-0.8%	-0.5%	-0.3%			-0.4%		
			Long Island		+0.1%	0.0%	-0.1%	-0.2%	-0.2%	0.0%	0.0%			0.0%		
			New Jersey		+0.0%	+0.0%	+0.2%	+0.2%	+0.1%	+0.2%	+0.1%			+0.1%		
			Connecticut		-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	0.0%	-0.2%			-0.3%		

Table 1.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO A B C D E F G	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
4B – Transportation: Highways and Local Intersections	Traffic – Highway Segments	The introduction of the CBD Tolling Program may produce increased congestion on highway segments approaching on circumferential roadways used to avoid Manhattan CBD tolls, resulting in increased delays and queues in midday and PM peak hours on certain segments in some tolling scenarios: ▪ Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday) Approaches to westbound George Washington Bridge on I-95 (midday) ▪ Southbound and northbound Franklin D. Roosevelt (FDR) Drive between East 10th Street and Brooklyn Bridge (PM) ▪ Other locations will see an associated decrease in congestion particularly on routes approaching the Manhattan CBD	10 highway segments (AM)	Highway segments with increased delays and queues in peak hours that would result in adverse effects	0 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D)	Yes	**Mitigation needed.** The Project Sponsors will implement a monitoring plan prior to implementation with post-implementation data collected approximately three months after the start of tolling operations and including thresholds for effects; if the thresholds are reached or crossed, the Project Sponsors will implement Transportation Demand Management (TDM) measures, such as ramp metering, motorist information, signage at all identified highway locations with adverse effects upon implementation of the Project. New York State Department of Transportation (NYSDOT) owns and maintains the relevant segments of the Long Island Expressway and I-95. The relevant segment of the FDR Drive is owned by NYSDOT south of Montgomery Street and New York City Department of Transportation (NYCDOT) north of Montgomery Street. Implementation of TDM measures will be coordinated between the highway owners and the owners of any assets relevant to implementing the TDM. Post-implementation of TDM measures, the Project Sponsors will monitor effects and, if needed, TBTA will modify the toll rates, crossing credits, exemptions, and/or discounts to reduce adverse effects.	AM - 1 out of 10 highway corridors (Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel); for some drivers, these increases will be offset by travel time savings within the CBD.	Yes	**No additional mitigation needed.** The Project Sponsors will implement the mitigation commitments of the Final EA.
			10 highway segments (midday)		2 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F			Midday - 1 out of 10 highway corridors (approaches to westbound George Washington Bridge on I-95); for some drivers, these increases will be offset by travel time savings within the CBD.		
			10 highway segments (PM)		1 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F			PM - 1 out of 10 highway corridors (southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge); for some drivers, these increases will be offset by travel time savings within the CBD.		
	Intersections	Shifts in traffic patterns, with increases in traffic at some locations and decreases at other locations, would change conditions at some local intersections within and near the Manhattan CBD. Of the 102 intersections analyzed, most intersections would see reductions in delay. Potential adverse effects on four local intersections in Manhattan: ▪ Trinity Place and Edgar Street (midday) ▪ East 36th Street and Second Avenue (midday) ▪ East 37th Street and Third Avenue (midday) ▪ East 125th Street and Second Avenue (AM, PM)	4 locations	Number of locations with potential adverse effects that will be addressed with signal timing adjustments	4 in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F	Yes	**Mitigation needed**. NYCDOT will monitor those intersections where potential adverse effects were identified and implement appropriate signal timing adjustments to mitigate the effect, per NYCDOT's normal practice. **Enhancement** Refer to the overall enhancement on monitoring at the end of this table.	Potential adverse effects at **1 location:** East 125th Street at Second Avenue (PM)	Yes	**No additional mitigation needed.** The mitigation commitment remains for East 125th Street at Second Avenue; for the other three locations identified in the Final EA, NYCDOT is maintaining the commitment to implement the measures identified in the Final EA as an enhancement.

Table 1.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4C – Transportation: Transit	Transit Systems	The Project would generate a dedicated revenue source for investment in the transit system. Transit ridership would increase by 1 to 2 percent systemwide for travel to and from the Manhattan CBD, because some people would shift to transit rather than driving. Increases in transit ridership would not result in adverse effects on line-haul capacity on any transit routes.	New York City Transit	% Increase or decrease in total AM peak period boardings systemwide	1.5%	1.6%	1.7%	1.9%	2.0%	1.9%	1.8%	No	**No mitigation needed.** No adverse effects	1.7%	No	**No mitigation needed.** No adverse effects
			Port Authority Trans-Hudson (PATH)		0.8%	0.7%	1.4%	1.6%	2.0%	1.8%	1.6%			1.3%		
			Long Island Rail Road (LIRR)		0.6%	0.9%	1.1%	1.5%	2.0%	1.3%	1.0%			1.0%		
			Metro-North Railroad		0.6%	0.8%	1.3%	1.7%	1.4%	1.9%	0.8%			1.4%		
			NJ TRANSIT commuter rail		0.3%	0.5%	1.0%	1.5%	2.3%	1.7%	1.0%			0.9%		
			MTA/New York City Transit (NYCT) buses		1.3%	1.3%	1.5%	1.5%	1.6%	1.6%	1.2%			1.3%		
			NJ TRANSIT bus		0.7%	0.5%	0.6%	0.7%	1.1%	1.0%	0.7%			0.9%		
			Other buses (suburban and private operators)		0.2%	0.0%	0.9%	0.7%	0.5%	0.5%	0.1%			0.2%		
			Ferries (Staten Island Ferry, NYC Ferry, NY Waterway, Seastreak)		2.5%	2.7%	3.1%	3.2%	3.1%	3.6%	2.7%			2.9%		
			Roosevelt Island Tram		1.8%	1.7%	2.0%	2.2%	2.6%	2.5%	1.7%			2.9%		
	Bus System Effects	Decreases in traffic volumes within the Manhattan CBD and near the 60th Street boundary of the Manhattan CBD would reduce the roadway congestion that adversely affects bus operations, facilitating more reliable, faster bus trips.	Manhattan local buses	% Increase or decrease at maximum passenger load point	0.5%	0.5%	0.7%	1.1%	1.2%	0.9%	0.7%	No	**No mitigation needed.** No adverse effects	0.5%	No	**No mitigation needed.** No adverse effects
			Bronx express buses		-1.6%	2.0%	2.2%	-0.5%	2.0%	1.5%	-2.5%			0.6%		
			Queens local and express buses (via Ed Koch Queensboro Bridge)		2.2%	2.0%	2.3%	2.3%	2.5%	2.8%	2.0%			2.2%		
			Queens express buses (via Queens-Midtown Tunnel)		0.3%	0.2%	0.4%	0.8%	1.1%	0.8%	0.6%			0.5%		
			Brooklyn local and express buses		0.8%	1.0%	0.6%	0.7%	0.7%	0.8%	2.6%			0.5%		
			Staten Island express routes (via Brooklyn)		4.0%	4.5%	4.4%	3.8%	3.9%	3.7%	3.5%			3.9%		
			Staten Island express routes (via NJ)		1.0%	1.9%	2.3%	2.8%	1.8%	1.8%	2.4%			1.3%		
			NJ/West of Hudson buses (via Holland Tunnel)		-1.4%	-0.9%	-0.3%	1.4%	-0.9%	-0.6%	-1.4%			1.9%*		
			NJ/West of Hudson buses (via Lincoln Tunnel)		0.4%	0.6%	0.4%	0.6%	1.5%	1.1%	0.6%			0.8%		

Table 1.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4C – Transportation: Transit (Cont'd)	Transit Elements	Increased ridership would affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations: ▪ Hoboken Terminal, Hoboken, NJ PATH station ▪ Times Sq-42 St/42 St-Port Authority Bus Terminal subway station in the Manhattan CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines) ▪ Flushing-Main St subway station, Queens (No. 7 line) ▪ 14th Street-Union Square subway station in the Manhattan CBD (Nos. 4, 5, and 6; and L, N, Q, R, W lines) ▪ Court Square subway station, Queens (No. 7 and E, G, M lines)	Hoboken Terminal–PATH station (NJ) Stair 01/02	Net passenger increases at stair in the peak hour vs. No Action Alternative	45	72	122	164	240	205	139	Yes	**Mitigation needed for Tolling Scenarios E and F.** TBTA will coordinate with NJ TRANSIT and the Port Authority of New York and New Jersey (PANYNJ) to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after implementation shows an incremental change that is greater than or equal to 205, then TBTA will coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.	140	No	**No mitigation needed.** TBTA is maintaining its commitment to implement the mitigation measures identified in the Final EA, including monitoring and improvements, if warranted, as an enhancement.
			42 St-Times Square–subway station (Manhattan) Stair ML6/ML8 connecting mezzanine to uptown 1/2/3 lines subway platform	Net passenger increases at stair in the peak hour vs. No Action Alternative	45	42	48	58	71	58	40	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	43	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Flushing-Main St subway station (Queens)–Escalator E456 connecting street to mezzanine level	Net passenger increases at stair in the peak hour vs. No Action Alternative	65	51	60	65	56	74	40	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the speed from 100 feet per minute (fpm) to 120 fpm.	61	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Union Sq subway station (Manhattan)–Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 line mezzanine	Net passenger increases at stair in the peak hour vs. No Action Alternative	14	19	20	23	23	22	14	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the escalator speed from 100 fpm to 120 fpm.	18	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Court Sq subway station (Queens)–Stair P2/P4 to Manhattan-bound No. 7 line	Net passenger increases at stair in the peak hour vs. No Action Alternative	127	117	133	135	130	152	126	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	122	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.,

Table 1.1 - Modified Final EA Table ES-5, Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

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4D – Transportation: Parking	Parking Conditions	All tolling scenarios would result in a reduction in parking demand within the Manhattan CBD of a similar magnitude to the reduction in auto trips into the Manhattan CBD. With a shift from driving to transit, there would be increased parking demand at subway and commuter rail stations and park-and-ride facilities outside the Manhattan CBD.	Manhattan CBD	Narrative	Reduction in parking demand due to reduction in auto trips to CBD Model results do not indicate an increase in demand for parking in the area immediately surrounding the CBD							No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects
			Transit Facilities	Narrative	Small changes in parking demand at transit facilities, corresponding to increased commuter rail and subway ridership							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

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4E – Transportation: Pedestrians and Bicycles	Pedestrian Circulation	Increased pedestrian activity on sidewalks outside transit hubs because of increased transit use. At all but one location in the Manhattan CBD (Herald Square/Penn Station), the increase in transit riders would not generate enough new pedestrians to adversely affect pedestrian circulation in the station area. Outside the Manhattan CBD, transit usage at individual stations would not increase enough to adversely affect pedestrian conditions on nearby sidewalks, crosswalks, or corners.	Herald Square/Penn Station NY	Sidewalks, corners, and crosswalks with pedestrian volumes above threshold in AM / PM peak periods	Adverse effects on pedestrian circulation at one sidewalk segment and two crosswalks							Yes	**Mitigation needed.** The Project Sponsors will implement a monitoring plan at this location. The plan will include a baseline, specific timing, and a threshold for additional action. If that threshold is reached, NYCDOT will increase pedestrian space on sidewalks and crosswalks via physical widening and/or removing or relocating obstructions.	Pedestrian volumes at key transit stations/hubs would be similar to those predicted in Final EA. Adverse effects are no longer predicted at Herald Square.	No	**Mitigation is no longer needed.** The Project Sponsors will implement the mitigation commitment described in the Fina EA**,** including monitoring and improvements, if warranted, as an enhancement
	Bicycles	Small increases in bicycle trips near transit hubs and as a travel mode	Manhattan CBD	Narrative	Small increases in bicycle trips near transit hubs with highest increases in pedestrian trip share							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
			Outside Manhattan CBD	Narrative	Some shifts from automobile to bicycles							No	**No mitigation needed**. No adverse effects		No	**No mitigation needed**. No adverse effects
	Safety	No adverse effects	Overall	Narrative	No substantial increases in pedestrian volumes or increased safety concerns, including at existing identified high-crash locations. Overall, with fewer vehicular trips entering and exiting the Manhattan CBD, the CBD Tolling Alternative could result in reduced traffic volumes at these locations. This would help to reduce vehicle-vehicle and vehicle-pedestrian conflicts, leading to an overall benefit to safety.							No	**No mitigation needed.** No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

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5A – Social Conditions: Population	Benefits	Benefits in and near the Manhattan CBD	28-county study area	Narrative	Benefits in and near the Manhattan CBD related to travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, reduced air pollutant emissions, and predictable funding source for transit improvements. This would positively affect community connections and access to employment, education, healthcare, and recreation for residents.							No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects
	Community Cohesion	Changes to travel patterns, including increased use of transit, resulting from new toll	28-county study area	Narrative	Changes to travel patterns, including increased use of transit, as a result of the Project would not adversely affect community cohesion or make it more difficult for people to connect with others in their community, given the extensive transit network connecting to the Manhattan CBD and the small change in trips predicted.							No	**No mitigation needed.** No adverse effects (see "Environmental Justice" for mitigation related to increased costs for low-income drivers).	Same as Final EA	No	**No mitigation needed.** Beneficial effects
	Indirect Displacement	No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents	Manhattan CBD	Narrative	The Project would not result in the potential for indirect (involuntary) residential displacement. It would not result in substantial changes to market conditions so as to lead to changes in housing prices, given that real estate values in the Manhattan CBD are already high and the many factors that affect each household's decisions about where to live. In addition, low-income residents of the CBD would not experience a notable increase in the cost of living as a result of the Project because of the lack of change in housing costs, the many housing units protected through New York's rent-control, rent-stabilization, and other similar programs, the tax credit available to CBD residents with incomes of up to $60,000, and the conclusion that the cost of goods would not increase as a result of the Project (see "Economic Conditions").							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Community Facilities and Services	Increased cost for community facilities and service providers in the Manhattan CBD, their employees who drive, and clientele who drive from outside the CBD	Manhattan CBD	Narrative	The Project would increase costs for community service providers that operate vehicles into and out of the Manhattan CBD and for people who travel by vehicle to community facilities and services in the Manhattan CBD, as well as residents of the CBD and employees of community facilities who use vehicles to travel to community facilities outside the CBD. Given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on community facilities and services.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Effects on Vulnerable Social Groups	Benefits to vulnerable social groups from new funding for MTA Capital Program	28-county study area	Narrative	The Project would benefit certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations by creating a funding source for the MTA 2020–2024 Capital Program (and subsequent capital programs and by reducing congestion in the Manhattan CBD). Elderly individuals would benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative, as bus passengers tend to be older than riders on other forms of transit, such as the subway and, as described above, bus passengers in the Manhattan CBD would benefit from travel-time savings due to the decrease in congestion. People over the age of 65 with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA's paratransit service, including taxis and for-hire vehicles (FHVs) operating on behalf of MTA to transport paratransit users. Elderly people with disabilities and low-income individuals who drive to the Manhattan CBD would be entitled to the same mitigation and enhancements proposed for low-income and disabled populations, in general. Other elderly individuals who drive to the Manhattan CBD would pay the toll.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Access to Employment	Increased cost for small number of people who drive to work	28-county study area	Narrative	Decrease in work trips by driving modes to and within the Manhattan CBD, with an offsetting increase in transit ridership. Those who drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD. Negligible effect (less than 0.1%) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today.							No	**No mitigation needed.** No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

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5B – Social Conditions: Neighborhood Character	Neighborhood character	No notable change in neighborhood character	Manhattan CBD	Narrative	The changes in traffic patterns on local streets would not change the defining elements of the neighborhood character of the Manhattan CBD.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
			Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street CBD boundary (including increases just north of 60th Street and decreases just to the south) would not create a climate of disinvestment that could lead to adverse effects on neighborhood character nor alter the defining elements of the neighborhood character of this area.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
5C – Social Conditions: Public Policy	Public policy	No effect	28-county study area	Narrative	The Project would be consistent with regional transportation plans and other public policies in place for the regional study area and the Manhattan CBD.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

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6 – Economic Conditions	Benefits	Regional economic benefits	28-county study area	Narrative	Economic benefit through congestion relief in terms of travel-time savings and travel-time reliability improvements, which would increase productivity and utility, as well as safety improvements and reduced vehicle operating costs associated with reductions in congestion.							No	**No mitigation needed**. Beneficial effects	Same as Final EA	No	**No mitigation needed**. Beneficial effects
	Economic Effects of Toll Costs	Cost of new toll for workers and businesses in the CBD that rely on vehicles	Manhattan CBD	Narrative	No adverse effects to any particular industry or occupational category in the Manhattan CBD. Given the high level of transit access in the CBD and high percentage of transit share, the toll would affect only a small percentage of the overall workforce. This would not adversely affect operations of businesses in the Manhattan CBD or the viability of any business types, including the taxi/FHV industry.							No	**No mitigation needed.** No adverse effects **Enhancements** The Project Sponsors commit to establishing a Small Business Working Group (SBWG) that will meet 6 months prior and 6 months after Project implementation, and annually thereafter, to solicit ongoing input on whether and how businesses are being affected. As part of mitigation for other topics, TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will also benefit some workers and businesses.	Same as Final EA	No	**No mitigation needed.** No adverse effects The Project Sponsors will implement the Enhancements described in the Final EA.
	Price of Goods	Cost of new toll would not result in changes in the cost of most consumer goods	Manhattan CBD	Narrative	Not anticipated to result in meaningful change in cost for most consumer goods. Any cost increase associated with the new toll in the CBD Tolling Alternative that would be passed along to receiving businesses would be distributed among several customers per toll charge (since trucks make multiple deliveries) especially for businesses, including small businesses and micro-businesses, receiving smaller deliveries. This would minimize the cost to any individual business. Some commodity sectors (construction materials, electronics, beverages) are more prone to increases due to less competition within delivery market.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed.** No adverse effects
	Taxi and FHV Industry*	Depending on the tolling scenario, the toll could reduce taxi and FHV revenues due to a reduction in taxi/FHV VMT with passengers within the CBD. While this could adversely affect individual drivers (see "Environmental Justice"), the industry would remain viable overall.	28-county study area	Net change in daily taxi/FHV VMT regionwide	-126,993 (-2.9%)	-14,028 (-0.3%)	-73,413 (-1.7%)	-217,477 (-5.0%)	-116,065 (-2.7%)	-4,888 (-1.0%)	-137,815 (-3.2%)	No	**No mitigation needed.** No adverse effects (see "Environmental Justice" for mitigation related to effects on taxi and FHV drivers).	-30,963 (-0.7%)	No	**No mitigation needed.** No adverse effects
				Net change in daily taxi/FHV VMT in the CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)			-904 (-0.3%)		
	Local Economic Effects	Changes in parking demand near the 60th Street CBD boundary	Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street Manhattan CBD boundary (including increases just north of 60th Street and decreases just to the south) could jeopardize the viability of one or more parking facilities in the area south of 60th Street but would not create a climate of disinvestment that could lead to adverse effects on neighborhood character.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed.** No adverse effects

Note:

* The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber).

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7 – Parks and Recreational Resources		New tolling infrastructure, tolling system equipment, and signage in the southern portion of Central Park	Manhattan CBD	Narrative	The Project would replace four existing streetlight poles at three detection locations in Central Park near 59th Street and on two adjacent sidewalks outside the park's wall. These poles would be in the same locations as existing poles and would not reduce the amount of park space or affect the features and activities of the park. The Project would also place tolling infrastructure beneath the structure of the High Line, outside the park area atop the High Line structure. Following consideration of public input received during the public comment period, FHWA concluded that the CBD Tolling Alternative would have a *de minimis* impact on Central Park and the High Line.							No	**No mitigation needed.** Refer to **Chapter 7, "Parks and Recreational Resources,"** for a listing of measures to avoid adverse effects to parks.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** The Project Sponsors will implement measures described in the Final EA.
8 – Historic and Cultural Resources		New tolling infrastructure and tolling system equipment on or near historic properties	45 historic properties within the Project's Area of Potential Effects (APE)	Narrative	Based on a review of the Project in accordance with Section 106 of the National Historic Preservation Act, FHWA has determined that the Project would have No Adverse Effect on historic properties and the State Historic Preservation Office has concurred.							No	**No mitigation needed.** Refer to **Chapter 8, "Historic and Cultural Resources,"** for a listing of measures to avoid adverse effects to historic properties.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** The Project Sponsors will implement the measures described in the Final EA.
9 – Visual Resources		Changes in visual environment resulting from new tolling infrastructure and tolling system equipment	Area of visual effect	Narrative	Infrastructure and equipment would be similar in form to streetlight poles, sign poles, or similar structures already in use throughout New York City. Cameras included in the array of tolling system equipment would use infrared illumination at night to allow images of license plates to be collected without any need for visible light. The Project would have a neutral effect on viewer groups and no adverse effect on visual resources							No	**No mitigation needed**. No adverse effects	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** No adverse effects.

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10 – Air Quality		Increases or decreases in emissions related to truck traffic diversions	Cross Bronx Expressway at Macombs Road, Bronx, NY	Increase or decrease in Annual Average Daily Traffic (AADT)	3,901	3,996	2,056	1,766	3,757	2,188	3,255	No	**No mitigation needed.** No adverse effects **Enhancements** **1.** Refer to the overall enhancement on monitoring at the end of this table. **2.** TBTA will work with the NYC Department of Health and Mental Hygiene (DOHMH) to expand the existing network of sensors to monitor priority locations and supplement a smaller number of real-time $PM_{2.5}$ monitors to provide insight into time-of-day patterns to determine whether the changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will select the additional monitoring locations in consideration of air quality analysis in the EA and input from environmental justice stakeholders. NYS Department of Environmental Conservation (NYSDEC) and other agencies conducting monitoring will also be consulted prior to finalizing the monitoring approach. The Project Sponsors will monitor air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, and separate from ongoing air quality monitoring and reporting, the Project Sponsors will assess the magnitude and variability of changes in air quality to determine whether more monitoring sites are necessary. Data collected throughout the monitoring program will be made available publicly as data becomes available and analysis is completed. Data from the real-time monitors will be available online continuously from the start of pre-implementation monitoring. **3.** MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus depots and along bus routes. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed an approach that actively incorporates these priorities in the deployment phasing process of the transition. Based on feedback received during the outreach conducted for the Project and concerns raised by members of environmental justice communities, TBTA coordinated with MTA NYCT, which is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in MTA's next major procurement of battery electric buses, which began in late 2022. This independent effort by MTA NYCT is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.	3,917	No	**No mitigation needed.** The Project Sponsors are maintaining their commitment to implement the enhancement measures identified in the Final EA and FONSI.
				Percent change in AADT compared to No Action Alternative	2%	2%	1%	1%	2%	1%	2%			2%		
				Increase or decrease in daily number of trucks	509	704	170	510	378	536	50			433		
				Percent change in daily number of trucks compared to No Action Alternative	2%	3%	1%	2%	1%	2%	0%			2%		
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		
			I-95, Bergen County, NJ	Increase or decrease in AADT	9,843	11,459	7,980	5,003	7,078	5,842	12,506	No		10,341	No	
				Percent change in AADT compared to No Action Alternative	4%	5%	3%	2%	3%	2%	5%			4%		
				Increase or decrease in daily number of trucks	801	955	729	631	696	637	-236			499		
				Percent change in daily number of trucks compared to No Action Alternative	2%	3%	2%	2%	2%	2%	-1%			1%		
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		

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10 – Air Quality (Cont'd)		Increases or decreases in emissions related to truck traffic diversions (Cont'd)	RFK Bridge, NY	Increase or decrease in AADT	18,742	19,440	19,860	19,932	20,465	20,391	21,006	No	See above	20,273	No	**No mitigation needed.** The Project Sponsors are maintaining their commitment to implement the enhancement measures identified in the Final EA and FONSI.
				Percent change in AADT compared to No Action Alternative	13%	14%	14%	14%	15%	15%	15%			14%		
				Increase or decrease in daily number of trucks	2,257	2,423	2,820	3,479	4,116	3,045	432			2,433		
				Percent change in daily number of trucks compared to No Action Alternative	15%	16%	18%	22%	27%	20%	3%			16%		
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		

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11 – Energy		Reductions in regional energy consumption	12-county study area	Narrative	Reductions in regional VMT would reduce energy consumption							No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects
12 – Noise		Imperceptible increases or decreases in noise levels resulting from changes in traffic volumes	Bridge and tunnel crossings	Narrative	The maximum noise level increases (2.9 A-weighted decibels, or dB(A)), which were predicted adjacent to the Queens-Midtown Tunnel in Tolling Scenario D, would not be perceptible.							No	**No mitigation needed**. No adverse effects **Enhancement** Refer to the overall enhancement on monitoring at the end of this table.	The maximum predicted noise level increase (0.5 dB(A)), at Robert F. Kennedy (RFK) Bridge in Manhattan, would not be perceptible.	No	**No mitigation needed**. No adverse effects. The Project Sponsors are maintaining their commitment to implement the enhancement measures identified in the Final EA and FONSI.
			Local streets	Narrative	Tolling Scenario C was used to assess noise level changes in Downtown Brooklyn, Tolling Scenario D was used at all other locations assessed. The maximum predicted noise level increases (2.5 dB(A)), which were at Trinity Place and Edgar Street, would not be perceptible. There was no predicted increase in noise levels in the Downtown Brooklyn locations.							No		The maximum predicted noise level increases (2.8 dB(A)), at W. 179th St / Broadway, would not be perceptible.	No	

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EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
13 – Natural Resources		Construction activities to install tolling infrastructure near natural resources	Sites of tolling infrastructure and tolling system equipment	Narrative	No effects on surface waters, wetlands, or floodplains. Potential effects on stormwater and ecological resources will be managed through construction commitments. The Project is consistent with coastal zone policies.							No	Refer to **Chapter 13, "Natural Resources,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.
14 – Hazardous Waste		Potential for disturbance of existing contaminated or hazardous materials during construction	Sites of tolling infrastructure and tolling system equipment	Narrative	Soil disturbance during construction and the potential alteration, removal, or disturbance of existing roadway infrastructure and utilities that could contain asbestos-containing materials, lead-based paint, or other hazardous substances. Potential effects will be managed through construction commitments.							No	Refer to **Chapter 14, "Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.
15 – Construction Effects		Potential disruption related to construction for installation of tolling infrastructure	Sites of tolling infrastructure and tolling system equipment	Narrative	Temporary disruptions to traffic and pedestrian patterns, and noise from construction activities, with a duration of less than one year overall, and approximately two weeks at any given location. These effects will be managed through construction commitments.							No	Refer to **Chapter 15, "Construction Effects,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to construction for new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.

Table 1.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
17 – Environmental Justice	Low-income drivers	The EA as published in August 2022 found the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have a reasonable alternative for reaching the Manhattan CBD. With further analysis of the population affected and the addition of new mitigation, the Final EA concludes there would not be a disproportionately high and adverse effect on low-income drivers.	28-county study area	Narrative	The increased cost to drivers would occur under all tolling scenarios.							Yes	**Mitigation needed.** The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than $60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the NYS tax credit. TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit. TBTA will eliminate the $10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access. TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-loaded balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware. TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware. The Project Sponsors commit to establishing an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting taking place prior to Project implementation, to share updated data and analysis and hear about potential concerns. As it relates to environmental justice, the Project Sponsors will continue providing meaningful opportunities for participation and engagement by sharing updated data and analysis, listening to concerns, and seeking feedback on the toll setting process. TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will benefit low-income drivers who travel during that time. For five years, TBTA commits to a Low-Income Discount Plan for low-income frequent drivers who will benefit from a 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted). **Enhancement** TBTA will coordinate with MTA NYCT to improve bus service in areas identified in the EA as the Brooklyn and Manhattan Bus Network Redesigns move forward.	Incorporating the identified mitigation, no disproportionately high and adverse effect would occur on low-income drivers.	Yes	No change in identified mitigation needed. The adopted toll structure incorporates and expands the mitigation commitments of the Final EA and FONSI. The adopted toll structure includes an overnight toll for trucks and other vehicles at 25 percent of the peak toll from 9 p.m. to 5 a.m. on weekdays and 9 p.m. to 9 a.m. on weekends. The adopted toll structure commits, for five years to a Low-Income Discount Plan for low-income frequent drivers who will benefit from a 50 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted).

Table 1.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
17 – Environmental Justice	Taxi and FHV drivers*	The EA as published in August 2022 found a potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new CBD toll and the reduction of VMT for taxis and FHVs, which would result in a decrease in revenues that could lead to losses in employment. With the addition of new mitigation, the Final EA concludes there would not be a disproportionately high and adverse effect on taxi and FHV drivers.	New York City	Narrative	Potential adverse effect would occur in Tolling Scenarios A, D, and G, which would not have caps or exemptions for taxis and FHV drivers.							Yes	**Mitigation needed.** TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final CBD toll structure.	No disproportionately high and adverse effect would occur on New York City taxi and FHV drivers with the adopted toll structure, which includes a per-trip toll on trips to, within, or from the CBD of $1.25 for taxis and $2.50 for FHVs. These per-trip tolls are equivalent to the once per day toll for passenger vehicles included as part of the adopted toll structure.	No	Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily toll rate for automobiles. In addition, the adopted toll structure requires the cost of the toll to be paid by the passenger rather than the taxi or FHV driver.*
				Change in daily taxi/FHV VMT with passengers in the CBD relative to No Action Alternative: Scenarios included in EA	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)			-904 (-0.3%)		
				Net change in daily taxi/FHV trips to CBD relative to scenarios included in EA: Additional analysis to assess effects of caps or exemptions	Tolls capped at 1x / Day: +2%	—	—	Tolls capped at 1x / Day: +3% Exempt: +50%	—	—	Tolls capped at 1x / Day: +2%			NA		

Note:

* The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber).

Table 1.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO A B C D E F G	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
17 – Environmental Justice (Cont'd)	Increases or decreases in traffic, as a result of traffic diversions, in communities already overburdened by pre-existing air pollution and chronic diseases	Certain environmental justice communities would benefit from decreased traffic; some communities that are already overburdened by pre-existing air pollution and chronic diseases could see an adverse effect as a result of increased traffic.	The specific census tracts that would experience increased or decreased traffic change slightly depending on the tolling scenario. The following communities could have census tracts that merit place-based mitigation: High Bridge–Morrisania, Crotona–Tremont, Hunts Point–Mott Haven, Pelham–Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Lower East Side/Lower Manhattan, Downtown Brooklyn–Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee.	Narrative	Census tracts with pre-existing air pollutant and chronic disease burdens that would benefit from reduced traffic, and those affected by increased traffic would vary somewhat, but the identified communities remain largely the same across tolling scenarios. Under Tolling Scenario G, Fort Lee would not experience increases.	Yes	**Mitigation needed.** **<u>Regional Mitigation</u>** TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final toll structure; this will reduce truck diversions. NYCDOT will expand the NYC Clean Trucks Program to accelerate the replacement of eligible diesel trucks, which travel on highways in certain environmental justice communities where the Project is projected to increase truck traffic, to lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles. NYCDOT will expand its off-hours delivery program in locations where the Project is projected to increase truck diversions to reduce daytime truck traffic and increase roadway safety in certain environmental justice communities. **<u>Place-based Mitigation</u>** TBTA will toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then turn to immediately travel south on FDR Drive; this will mitigate modeled non-truck traffic increases on the FDR Drive between the Brooklyn Bridge and East Houston Street. NYCDOT will coordinate to replace diesel-burning transport refrigeration units (TRUs) at Hunts Point with cleaner vehicles. NYSDOT will coordinate to expand electric truck charging infrastructure. The Project Sponsors will coordinate to install roadside vegetation to improve near-road air quality. The Project Sponsors will renovate parks and greenspaces. The Project Sponsors will install or upgrade air filtration units in schools. The Project Sponsors will coordinate to expand existing asthma case management programs and create new community-based asthma programming through a neighborhood asthma center in the Bronx.	Census tracts with pre-existing air pollutant and chronic disease burdens that would benefit from reduced traffic, and those affected by increased traffic vary somewhat from the Final EA, as anticipated. The communities that merit place-based mitigation remain the same as those identified in the Final EA and of the $100m committed in place-based mitigation funds, target allocations have been made for each community as follows: Crotona–Tremont, $22.6m; High Bridge–Morrisania, $9.2m; Hunts Point–Mott Haven, $18.9m; Northeast Bronx, $4.4m; Pelham–Throgs Neck, $16.6m; Downtown–Heights–Slope (Downtown Brooklyn–Fort Greene), $5.7m; Greenpoint (South Williamsburg), $7.4m; East Harlem, $4.4m; Randall's Island, $0.9m; Fort Lee, $1.4m; City of Orange, $0.9m; East Orange, $1.8m; and Newark, $5.7M. (See Note 2). TBTA's place-based mitigation for Union Square - Lower East Side (Lower East Side) has no associated cost.	Yes	**No additional mitigation needed.** The Project Sponsors will mplement the mitigation commitments of the Final EA and FONSI listed under Mitigation and Enhancements" in this table).

Note: Based on analysis of the adopted toll structure, communities and census tracts where place-based mitigation measures will be implemented have been confirmed – the specific siting of mitigation measures is being determined through analysis of data on needs and feasibility and coordination among the Project Sponsors, the Environmental Justice Community Group (representing the 10-county environmental justice study area), and relevant stakeholders and implementing agencies; see "**Benefits and Allocation of Funding for Mitigation Measures**," above.

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

2 Project Description: Adopted Toll Structure

The CBD Tolling Program will implement a vehicular tolling program to reduce traffic congestion in the Manhattan CBD, consistent with the Traffic Mobility Act. Traffic congestion is expected to be reduced by disincentivizing use of vehicles within the CBD by imposition of tolls, and concurrently by investments in transit that will incentivize use of transit systems instead of driving. The Project purpose is to reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements, pursuant to acceptance into FHWA's Value Pricing Pilot Program (VPPP).

The Manhattan CBD consists of the geographic area of Manhattan south and inclusive of 60th Street, but not including Franklin D. Roosevelt Drive (FDR Drive), West Side Highway/Route 9A, the Battery Park Underpass, and any surface roadway portion of the Hugh L. Carey Tunnel connecting to West Street (the West Side Highway/Route 9A).

TBTA will toll vehicles entering the Manhattan CBD via a cashless tolling system. The toll amount will be variable, with higher tolls charged during peak periods when congestion is greater. The toll will apply to all registered vehicles (i.e., those with license plates), with the exception of qualifying vehicles transporting persons with disabilities, qualifying authorized emergency vehicles, transit buses, and specialized government vehicles. Passenger vehicles will be tolled no more than once a day. Taxis and FHVs will be tolled for each trip entering, leaving, and within the CBD made with passengers.[2] Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily toll rate for automobiles. Under the adopted toll structure, taxi and FHV tolls will be paid by the passenger rather than the driver. The toll structure as adopted by the TBTA Board on March 27, 2024 is shown in **Figure 2.1** below.

The parameters of the adopted toll structure fall within the range of tolling scenarios evaluated in the Final EA, as illustrated in **Table 2.1** below, which is the re-creation of Final EA Table 2-3, "Tolling Scenarios Evaluated for the CBD Tolling Alternative" (from page 2-31 of the Final EA) with the adopted toll structure added. As shown in the table, the adopted toll structure has a simplified two-time-period structure (i.e., peak and overnight) on weekdays, as opposed to the three-time-period (i.e., peak, off-peak, and overnight) weekday structures studied in the Final EA. As there is no longer an off-peak period on weekdays, the weekday peak and overnight periods are longer than those studied in the Final EA and FONSI. The peak toll rates in the adopted toll structure are within the range of those presented in the Final EA and the overnight rates are lower than both the off-peak and overnight rates presented in the Final EA. Other parameters

[2] The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to high-volume FHVs (i.e., Lyft and Uber).

related to potential exemptions and caps on the number of tolls per day for certain vehicles also fall within the range presented in the Final EA and FONSI.

The adopted toll structure would use the same tolling infrastructure and tolling system equipment described and evaluated in the Final EA. Construction for the Project began in July 2023 and the construction of tolling infrastructure and tolling system equipment is now complete. Power and communications are nearing completion and testing is under way.

The adopted toll structure continues to meet the Project purpose, needs, and objectives. See Table 2.2, which is a re-creation of Final EA Table ES-3, "Comparison of Evaluation Results for the No Action and CBD Tolling Alternatives" (from page ES-14 of the Final EA) with the adopted toll structure added.

Figure 2.1 Adopted Toll Structure

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CENTRAL BUSINESS DISTRICT (CBD) CHARGES			
a	E-ZPass Customers VEHICLE CLASSIFICATION	CBD ENTRY CHARGE	TUNNEL CROSSING CREDIT
1	Passenger and other vehicles, including sedans, sport utility vehicles, station wagons, hearses, limousines, pickup trucks with factory beds, pickup trucks with caps below the roofline and not extending over the sides, and vans without an extended roof above the windshield		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$15.00	
	Peak period for registered Low-Income Discount Plan participants using an eligible vehicle, 11th trip and trips thereafter in a calendar month (5am-9pm weekdays, 9am-9pm weekends)	$7.50	
	Peak period per-trip credit (maximum daily credit $5.00)		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$5.00
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$2.50
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$3.75	
2	Single-unit trucks, including non-articulated trucks, pickup trucks with modified beds, vans with modified body behind the drivers cab, pickup trucks with caps above the roofline or extending over the sides, and vans with an extended roof above the windshield		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$24.00	
	Peak period per-trip credit		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$12.00
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$6.00
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$6.00	
3	Multi-unit trucks, including articulated trucks where a power unit is carrying one or more trailers		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$36.00	
	Peak period per-trip credit		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$20.00
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$10.00
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$9.00	
4	Buses, including vehicles registered with the DMV and plated as a bus, omnibus, or have other designated official plates		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$24.00	
	Peak period per-trip credit		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$12.00
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$6.00
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$6.00	
	Licensed sightseeing buses		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$36.00	
	Peak period per-trip credit		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$20.00
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$10.00
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$9.00	
5	Motorcycles		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$7.50	
	Peak period per-trip credit (maximum daily credit $2.50)		
	If entering the CBD via the Lincoln Tunnel or Holland Tunnel		$2.50
	If entering or exiting the CBD via the Queens-Midtown Tunnel or Hugh L. Carey Tunnel		$1.25
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$1.75	

E-ZPass CBD entry charges are available subject to terms, conditions, and agreements established by the Authority.

The Authority reserves the right to determine whether any vehicle is of unusual or unconventional design, weight, or construction and therefore not within any of the listed categories. The Authority also reserves the right to determine the CBD charge for any such vehicle of unusual or unconventional design, weight, or construction. Any single unit vehicle identified as belonging to Classes 1, 2, or 5 will be up-classed to the next toll class when towing a trailer or another vehicle.

Daily toll cap of once per day for Class 1 and Class 5 vehicles. Caps for other vehicles are subject to change pursuant to the adaptive management approach to mitigating project effects, as committed to in the Final Environmental Assessment.

CBD entry charges and tunnel credits are subject to a variable percentage increase/decrease of up to 10% for up to one year after implementation pursuant to the adaptive management approach to mitigating project effects, as committed to in the Final Environmental Assessment.

The Low-Income Discount Plan shall continue for five years as committed to in the Final Environmental Assessment.

The Authority reserves the right to charge a 25% higher CBD charge during Gridlock Alert Days. Each year, the NYCDOT identifies Gridlock Alert Days during the UN General Assembly and throughout the holiday season when heavy traffic is expected in Manhattan. On Gridlock Alert Days, consider walking, biking, or taking mass transit for any trips in Manhattan.

Qualifying authorized emergency vehicles and qualifying vehicles transporting persons with disabilities are exempt pursuant to Vehicle and Traffic Law § 1704-a (2).

Qualifying authorized commuter buses and specialized government vehicles, as determined by the Authority, are exempt.

Figure 2.1 Adopted Toll Structure (Cont'd)

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY CENTRAL BUSINESS DISTRICT (CBD) CHARGES			
b	Customers Using Fare Media Other Than E-ZPass VEHICLE CLASSIFICATION	CBD ENTRY CHARGE	PER TRIP CHARGE PLAN* (TO/FROM/WITHIN/ THROUGH CBD)
1	Passenger and other vehicles, including sedans, sport utility vehicles, station wagons, hearses, limousines, pickup trucks with factory beds, pickup trucks with caps below the roofline and not extending over the sides, and vans without an extended roof above the windshield		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$22.50	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$5.50	
2	Single-unit trucks, including non-articulated trucks, pickup trucks with modified beds, vans with modified body behind the drivers cab, pickup trucks with caps above the roofline or extending over the sides, and vans with an extended roof above the windshield		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$36.00	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$9.00	
3	Multi-unit trucks, including articulated trucks where a power unit is carrying one or more trailers		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$54.00	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$13.50	
4	Buses, including vehicles registered with the DMV and plated as a bus, omnibus, or have other designated official plates		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$36.00	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$9.00	
	Licensed sightseeing buses		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$54.00	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$13.50	
5	Motorcycles		
	Peak period (5am-9pm weekdays, 9am-9pm weekends)	$11.25	
	Overnight period (9pm-5am weekdays, 9pm-9am weekends)	$2.75	
	NYC TLC taxis, green cabs, for-hire vehicles (FHVs)		
	Taxis, green cabs, and FHVs on trips		$1.25
	FHVs on trips dispatched by high-volume for-hire services (HVFHSs)		$2.50

The Authority reserves the right to determine whether any vehicle is of unusual or unconventional design, weight, or construction and therefore not within any of the listed categories. The Authority also reserves the right to determine the CBD charge for any such vehicle of unusual or unconventional design, weight, or construction. Any single unit vehicle identified as belonging to Classes 1, 2, or 5 will be up-classed to the next toll class when towing a trailer or another vehicle.

Daily toll cap of once per day for Class 1 and Class 5 vehicles. Caps for non-passenger vehicles are subject to change pursuant to the adaptive management approach to mitigating project effects, as committed to in the Final Environmental Assessment.

NYC TLC taxi, green cab, and FHV tolls are to be paid by the passenger pursuant to Rules of City of NY Taxi & Limousine Commn (35 RCNY) §§ 58-26 (f), 59A-23 (b), 59D-17 (c).

CBD entry charges and per trip charges are subject to a variable percentage increase/decrease of up to 10% for up to one year after implementation pursuant to the adaptive management approach to mitigating project effects, as committed to in the Final Environmental Assessment.

The Authority reserves the right to charge a 25% higher CBD charge during Gridlock Alert Days. Each year, the NYCDOT identifies Gridlock Alert Days during the UN General Assembly and throughout the holiday season when heavy traffic is expected in Manhattan. On Gridlock Alert Days, consider walking, biking, or taking mass transit for any trips in Manhattan.

Qualifying authorized emergency vehicles and qualifying vehicles transporting persons with disabilities are exempt pursuant to Vehicle and Traffic Law § 1704-a (2).

Qualifying authorized commuter buses and specialized government vehicles, as determined by the Authority, are exempt.

**Subject to full execution of and compliance with plan agreement by FHV bases and taxi technology system providers.*

Table 2.1 - Modified Final EA Table 2-3. Tolling Scenarios Evaluated for the CBD Tolling Alternative – with the Adopted Toll Structure Added

PARAMETER	SCENARIO A Base Plan	SCENARIO B Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes	ADOPTED TOLL STRUCTURE
Time Periods[1]								
Peak: Weekdays	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 8 PM	6 AM – 10 AM; 4 PM – 8 PM	6 AM – 8 PM	5 AM – 9 PM[2]
Peak: Weekends	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	10 AM – 10 PM	9 AM – 9 PM
Off Peak: Weekdays	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	8 PM – 10 PM	10 AM – 4 PM	8 PM – 10 PM	9 PM – 5 AM
Overnight: Weekdays	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	10 PM – 6 AM	8 PM – 6 AM	10 PM – 6 AM	
Overnight: Weekends	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	10 PM – 10 AM	9 PM – 9 AM
Potential Crossing Credits								
Credit Toward CBD Toll for Tolls Paid at Tunnel Entries	No	No	Yes - Low	Yes - High	Yes - High	Yes - High	No	Yes - Low
Credit Toward CBD Toll for Tolls Paid at Bridges to Manhattan	No	No	No	No	No	Yes - High	No	No
Potential Exemptions and Limits (Caps) on Number of Tolls per Day[4,5,6]								
Autos, motorcycles, and mercial vans	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day
Taxis	No cap	Once per day	Exempt	No cap	Exempt	Once per day	No cap	$1.25 per trip toll on trips to, within, or from the CBD (see note 4)
FHVs	No cap	Once per day	Three times per day	No cap	Three times per day	Once per day	No cap	$2.50 per trip toll on trips to, within, or from the CBD (see note 4)
Small and large trucks	No cap	Twice per day	No cap	No cap	No cap	Once per day	No cap	No cap
Buses	No cap	Exempt	No cap	No cap	Transit buses – Exempt No cap on other buses	Exempt	No cap	Certain buses – Exempt (see note 5)

PARAMETER	SCENARIO A Base Plan	SCENARIO B Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes	ADOPTED TOLL STRUCTURE
Approximate Toll Rate Assumed for Autos, Commercial Vans, and Motorcycles[3]								
Peak	$9	$10	$14	$19	$23	$23	$12	$15
Off Peak	$7	$8	$11	$14	$17	$17	$9	$3.75
Overnight	$5	$5	$7	$10	$12	$12	$7	$3.75
Approximate Toll Rate Assumed for Trucks (Small Trucks/Large Trucks)[3]								
Peak	$18 / $28	$20 / $30	$28 / $42	$38 / $57	$46 / $69	$65 / $82	$12 / $12	$24 / $36
Off Peak	$14 / $21	$15 / $23	$21 / $32	$29 / $43	$35 / $52	$49 / $62	$9 / $9	
Overnight	$9 / $14	$10 / $15	$14 / $21	$19 / $29	$23 / $35	$33 / $41	$7 / $7	$6 / $9

Notes:

1 Tolls would be higher during peak periods when traffic is greatest. All tolling scenarios include a higher toll on designated "Gridlock Alert" days, although the modeling conducted for the Project does not reflect this higher toll since it considers typical days rather than days with unusually high traffic levels.

2 The adopted toll structure has a simplified two-time-period structure (i.e., peak and overnight) on weekdays, as opposed to the three-time-period (i.e., peak, off-peak, and overnight) weekday structures studied in the Final EA. As there is no longer an off-peak period on weekdays, the weekday peak and overnight periods are longer than those studied in the Final EA. The transportation modeling conducted for the adopted toll structure accounts for this change in the peak and off-peak periods and thus the model results reflect this change.

3 Toll rates are for vehicles using E-ZPass and are rounded. For all tolling scenarios, different rates would apply for vehicles not using E-ZPass.

4 The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber).

5. The per-trip tolls for taxis and FHVs in the adopted toll structure would be equivalent to the auto peak rate of $15 (based on NYC Taxi and Limousine Commission analysis of trips made by TLC-licensed vehicles in May 2023: for taxis the average number of trips with passengers to/from/within the CBD is 12, and for FHVs it is 6).

6 With the adopted toll structure, qualifying authorized emergency vehicles and qualifying vehicles transporting people with disabilities would be exempt from the toll. Specialized government vehicles would also be exempt. School buses contracted with the NYC Department of Education, commuter vans licensed with the NYC Taxi and Limousine Commission, and buses providing scheduled commuter services open to the public would also be exempt from the toll.

Table 2.2 - Modified Final EA Table ES-3. Comparison of Evaluation Results for the No Action and CBD Tolling Alternatives – with the Adopted Toll Structure Added

SCREENING CRITERION	NO ACTION ALTERNATIVE	CBD TOLLING (ACTION) ALTERNATIVE FINAL EA SCENARIOS	ADOPTED TOLL STRUCTURE
Purpose and Need: Reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements	DOES NOT MEET	MEETS	MEETS
Objective 1: Reduce daily vehicle-miles traveled (VMT) within the Manhattan CBD Criterion: Reduce by 5% (relative to No Action)	DOES NOT MEET	MEETS	MEETS
Daily VMT reduction (2023)	0%	7.1% - 9.2%	8.9%
Objective 2: Reduce the number of vehicles entering the Manhattan CBD daily Criterion: Reduce by 10% (relative to No Action)	DOES NOT MEET	MEETS	MEETS
Daily vehicle reduction (2023)	0%	15.4% - 19.9%	17.3%
Objective 3: Create a funding source for capital improvements and generate sufficient annual net revenues to fund $15 billion for capital projects for MTA's Capital Program	DOES NOT MEET	MEETS[1]	MEETS
Net revenue to support MTA's Capital Program[2]	$0	$1.0 billion - $1.5 billion	$0.9 billion
Objective 4: Establish a tolling program consistent with the purposes underlying the New York State legislation entitled the "MTA Reform and Traffic Mobility Act"	DOES NOT MEET	MEETS	MEETS

Notes:

1 Although Final EA Tolling Scenario B would not meet Objective 3 with the toll rates identified and assessed in the Final EA, additional analysis was conducted to demonstrate that it would meet this objective with a higher toll rate; the resulting VMT reduction and revenue for that modified scenario would fall within the range of the other Final EA scenarios.

2 The net revenue needed to fund $15 billion depends on a number of economic factors, including but not limited to interest rates and term. For the purposes of the Final EA, the modeling assumes the Project should provide at least $1 billion annually in total net revenue, which would be invested or bonded to generate sufficient funds. The net revenue values provided in this table are rounded and based on Project modeling. Following completion of the Final EA, based on current interest rates and expected timing of projects, MTA's Chief Financial Officer has determined that annual net revenues in the range of $0.9 billion should be sufficient to meet the Project's need to fund $15 billion of capital projects for the MTA Capital Program.

3 Analysis Framework: General Methodology for Reevaluation

To evaluate the adopted toll structure's effects in comparison to those described in the Final EA, the Project Sponsors used the same methodologies as used for the analyses in the Final EA. For each analysis topic, they considered the effects of the adopted toll structure in comparison to the effects for the seven tolling scenarios evaluated in the Final EA. If preliminary evaluation of the adopted toll structure demonstrated that effects would be same as, or less than, those described in the Final EA, more detailed quantified analysis (such as modeling) was not conducted. For any effects where the preliminary evaluation was not conclusive, additional quantified analysis was conducted to further explore the effect.

The following sections of this reevaluation describe the methodologies used for each analysis topic in more detail. Where relevant to the analyses, the reevaluation includes information comparing the Final EA results to results for the adopted toll structure. Those comparisons include tables from the Final EA with the addition of the adopted toll structure, as well as new tables, where appropriate, that were not included in the Final EA. Tables from the Final EA are provided using the same format and color palette as in the Final EA, with the same title as in the Final EA but are modified to indicate the addition of the adopted toll structure as follows:

Table [X.X] - Modified Final EA Table [Number]. Table Title from Final EA – With Adopted Toll Structure Added

PARAMETER FOR COMPARISON	FINAL EA	ADOPTED TOLL STRUCTURE

New tables that were not in the Final EA have new titles and, thus, do not reference the Final EA, use a different color palette and sequential table numbers, as follows:

Table [X.X] - New Title as Appropriate

PARAMETER FOR COMPARISON	FINAL EA	ADOPTED TOLL STRUCTURE

In addition, each section of this reevaluation presents the summary of effects table that was included in the Final EA, but updated to include the adopted toll structure (Table 1.1 in Section 1). In the Final EA, a summary of effects was included in three locations: in Table ES-5 of the "Executive Summary," at the end of each relevant Final EA chapter, and in Table 16-1 of Chapter 16, "Summary of Effects."

4A Transportation – Regional Transportation Effects and Modeling

Subchapter 4A of the Final EA presented the reasonably expected effects of implementing the CBD Tolling Alternative on the regional transportation system, including travel demand and mode choice. This section evaluates the effects of the adopted toll structure on the region's travel characteristics in comparison to the effects presented in the Final EA. Additional information is provided in Appendix 4A.

METHODOLOGY

Final EA Methodology

Subchapter 4A of the Final EA described the methodology used for forecasting changes to the regional transportation system in Section 4A.2, "Methodology," with additional supporting information in Final EA Appendix 4A.1. As detailed in the Final EA, the methodology included the following:

- Forecasted changes in travel demand for No Action Alternative and Final EA tolling scenarios using the New York Best Practice Model (BPM).
- Identified reasonably expected effects of implementing the CBD Tolling Alternative on the regional transportation system, including travel demand, mode choice, and traffic diversion.
- Provided for use in the other analyses in the Final EA. As described in the Final EA in Chapter 3, "Environmental Analysis Framework," page 3-5, the Final EA evaluated multiple tolling scenarios within the CBD Tolling Alternative to identify the range of potential effects that could occur from implementing the CBD Tolling Alternative. Quantitative analyses related to traffic patterns (in Final EA Subchapters 4B through 4E as well as the local intersection analyses in Chapters 10, "Air Quality," and 12, "Noise") considered the tolling scenario that would result in the greatest potential negative effects for that particular topic of analysis.

Reevaluation Methodology

- Modeled the adopted toll structure using the same version of the BPM as was used for the Final EA. This allowed comparison of the results for the adopted toll structure to the results presented in each analysis included in the Final EA.
- Provided BPM results for the adopted toll structure for use in the reevaluation of the full range of topics from the Final EA.

ANALYSIS AND RESULTS

The Final EA presented a summary of the modeling results for the No Action Alternative and Final EA tolling scenarios for the 28-county regional study area, with information for subareas within that study area. Information presented included VMT, mode share for journeys to the Manhattan CBD, and number of daily vehicles entering the CBD. This and the more detailed model results were used for the quantified analyses presented in other chapters of the Final EA, including analyses of the CBD Tolling Alternative's effects on traffic, transit, pedestrians, parking, air quality, noise, social conditions, economic conditions, and environmental justice.

For the reevaluation, the BPM was used to calculate the same information for the adopted toll structure as was estimated for the No Action Alternative and tolling scenarios in the Final EA. This information for the adopted toll structure was then used for the quantified analyses of the same topics in the reevaluation. Detailed results are provided in Appendix 4A.

Table 4A.1 presents information from the Final EA Table ES-5 summarizing the conclusions related to regional transportation effects and modeling, now modified to include the adopted toll structure.

FINDINGS

For the reevaluation, the Project Sponsors added the adopted toll structure to the same regional transportation model they used for evaluations in the Final EA, the BPM. The new modeling for the reevaluation produced a full set of results that allowed comparison to the modeling results evaluated in the Final EA. The results from the reevaluation analysis demonstrate that the adopted toll structure's effects on regional transportation patterns would be within the range of effects of the tolling scenarios studied in the Final EA. Key objectives for the Project as identified in the Final EA/FONSI are reducing the number of vehicles coming into the Manhattan CBD and reducing daily VMT in the CBD. The Final EA scenarios were predicted to reduce the number of daily vehicles entering the Manhattan CBD by approximately 15 to 20 percent. The adopted toll structure is predicted to reduce the number of vehicles entering the CBD by approximately 17 percent. Predicted reduction of VMT for the tolling scenarios in the Final EA ranged from approximately 7.1 to 9.2 percent. The adopted toll structure is predicted to reduce VMT in the CBD by approximately 8.9 percent. More details are in Table 4A.1.

Table 4A.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4A – Transportation: Regional Transportation Effects and Modeling	Vehicle Volumes	▪ Decreases in daily vehicle trips to Manhattan CBD overall. ▪ Some diversions to different crossings to Manhattan CBD or around the Manhattan CBD altogether, depending on tolling scenario. As traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD. ▪ Diversions would increase or decrease traffic volumes at local intersections near the Manhattan CBD crossings. ▪ Overall decrease in VMT in the Manhattan CBD and region overall in all tolling scenarios and some shift from vehicle to transit mode.	Crossing locations to Manhattan CBD	% Increase or decrease in daily vehicles entering the Manhattan CBD relative to No Action Alternative	-15%	-16%	-17%	-19%	-20%	-18%	-17%	No	**No mitigation needed.** Beneficial effects	-17%	No	**No mitigation needed.** Same as Final EA
	Auto Journeys to CBD		Manhattan CBD	% Increase or decrease in worker auto journeys to Manhattan CBD relative to No Action Alternative	-5%	-5%	-7%	-9%	-11%	-10%	-6%	No	**No mitigation needed.** Beneficial effects	-6%	No	**No mitigation needed.** Same as Final EA
				Absolute increase or decrease in daily worker auto trips to Manhattan CBD relative to No Action Alternative	-12,571	-12,883	-17,408	-24,017	-27,471	-24,433	-14,578			-16,447		
	Truck Trips Through CBD		Manhattan CBD	Increase or decrease in daily truck trips through Manhattan CBD (without origin or destination in the CBD) relative to No Action Alternative	-4,645 (-55%)	-4,967 (-59%)	-5,253 (-63%)	-5,687 (-68%)	-6,604 (-79%)	-6,784 (-81%)	-1,734 (-21%)	No	**No mitigation needed.** Beneficial effects	-4,627 (-55%)	No	**No mitigation needed.** Same as Final EA
	Transit Journeys		Manhattan CBD	% Increase or decrease in daily Manhattan CBD-related transit journeys relative to No Action Alternative	+1.2%	+1.2%	+1.7%	+2.2%	+2.5%	+2.1%	+1.5%	No	**No mitigation needed.** No adverse effects	+1.6%	No	**No mitigation needed.** Same as Final EA
	Traffic Results		Manhattan CBD	% Increase or decrease in daily VMT relative to No Action Alternative	-7.8%	-7.6%	-8.0%	-8.7%	-9.2%	-7.1%	-8.4%	No	**No mitigation needed.** Beneficial effects in Manhattan CBD, New York City (non-CBD), north of New York City, and Connecticut; although there would be VMT increases in Long Island and New Jersey, the effects would not be adverse.	-8.9%	No	**No mitigation needed.** Same as Final EA
			NYC (non-CBD)		-0.3%	-0.2%	-0.7%	-0.9%	-1.0%	-0.7%	-0.3%			-0.4%		
			NY north of NYC		-0.2%	-0.2%	-0.4%	-0.6%	-0.8%	-0.5%	-0.3%			-0.4%		
			Long Island		+0.1%	0.0%	-0.1%	-0.2%	-0.2%	0.0%	0.0%			0.0%		
			New Jersey		+0.0%	+0.0%	+0.2%	+0.2%	+0.1%	+0.2%	+0.1%			+0.1%		
			Connecticut		-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	0.0%	-0.2%			-0.3%		

4B Transportation – Highways and Local Intersections

Subchapter 4B of the Final EA presented the assessment of the CBD Tolling Alternative's potential effect on traffic operations on highways and local intersections. This section evaluates the effects of the adopted toll structure on the same key highway segments. It also examines the potential changes in traffic operations at local intersections resulting from the adopted toll structure. Additional information supporting the analyses conducted for the reevaluation is provided in **Appendix 4B**.

METHODOLOGY

Final EA Methodology

The methodology used to evaluate the effects of the CBD Tolling Alternative on traffic operations is described in Subchapter 4B of the Final EA in two sections: the methodology for the highway analysis is presented beginning on page 4B-18 in Section 4B.4.1, "Methodology," and the methodology for the local intersection analysis is presented beginning on page 4B-82 in Section 4B.6.1, "Methodology." See also the summary of the methodology beginning on page 4B-1 in Subchapter 4B. In summary, the Final EA analysis methodology included the following:

Highways

1. Used BPM output to predict changes in traffic volumes at bridges, tunnels, and highways approaching the CBD and bypassing the CBD.
2. Calibrated model results to account for over- or under-assignment by the BPM relative to observed conditions.
3. Used understanding of likely diversions, BPM results, and community concerns to identify specific highway segments for analysis (see Final EA Appendix 4B.1, pages 4B.1-1 through 4B.1-3).
4. Determined the tolling scenario that would be representative of those with the highest potential to increase traffic along certain alternate routes and at local intersections. The highway assessment considered the effects of the CBD Tolling Alternative using the tolling scenario with the highest potential diverted traffic volumes, Tolling Scenario D.
5. Conducted modeling analysis using Vissim model or Highway Capacity Software (HCS) model.
6. Based on significance criteria used in past environmental reviews conducted TBTA and NYSDOT, in consultation with NYCDOT, related to the increase in delays, identified adverse effects (see Final EA Subchapter 4B, Section 4B.4.1, pages 4B-20 and 4B-21).
7. Where potential adverse effects were identified, identified measures to avoid, reduce, or mitigate those effects.

Local Intersections

1. Used BPM output to predict changes in traffic volumes at bridges, tunnels, and highways approaching the CBD and bypassing the CBD.
2. Calibrated model results and assigned traffic to local routes.
3. In consultations with NYCDOT, identified and analyzed 102 local intersections within and outside the Manhattan CBD, grouping them functionally into 15 local study areas to be assessed.
4. Determined which Final EA tolling scenario to analyze, based on the scenario with the highest number of intersection locations with an increase of 50 or more vehicles. Using this method, Tolling Scenario D, which was also representative of Tolling Scenarios E and F, was identified as having the most number of intersection locations with an increase of 50 or more vehicles. Therefore, all 102 intersections were analyzed for Tolling Scenario D. An additional analysis was performed in the Downtown Brooklyn study area for Tolling Scenario C since that tolling scenario produced a larger number of intersections with an increase of 50 or more vehicles (see Final EA Subchapter 4B, Section 4B.6.3, "Potential Traffic Effects at Intersections," first paragraph on page 4B-95). As described in the Final EA, the analysis of potential effects on traffic intersection operations was based on the tolling scenario that would result in the greatest increase in vehicle volumes at the intersections in the study area. This methodology resulted in identification of the most potential negative effects of the CBD Tolling Alternative.
5. Conducted quantified analysis for the 102 intersections using Synchro model.
6. Based on significance criteria used in past environmental reviews conducted TBTA and NYSDOT, in consultation with NYCDOT, related to the increase in delays, identified adverse effects (see Final EA Subchapter 4B, Section 4B.6.1, pages 4B-85 and 4B-86).
7. Where potential adverse effects were identified, identified measures to avoid, reduce, or mitigate those effects.

Reevaluation Methodology

Highways

1. The first step in the methodology for reevaluation of highways was the same as in the Final EA.
2. The second step in the methodology for reevaluation of highways was the same as in the Final EA.
3. Determined incremental traffic volumes for the adopted toll structure at the 10 highway segments identified and evaluated in the Final EA.
4. For highway segments where a higher incremental volume would occur under the adopted toll structure, and for all highway segments predicted to have an adverse effect in the Final EA, conducted further evaluation of the effects resulting from adopted toll structure.

Local Intersections

1. The first step in the methodology for reevaluation of intersections was the same as in the Final EA.
2. Calibrated model results and assigned traffic to local routes in the 15 study areas identified in the Final EA

3. Identified intersections with higher increments under the adopted toll structure than in Tolling Scenario C or D, as appropriate, in the Final EA.
4. Conducted quantified analysis using Synchro models of the following:
    - Study areas in which any intersection in the study area had a higher incremental volume than described in the Final EA for that intersection.
    - Study areas in which the Final EA predicted a potential adverse effect at one or more intersections.

ANALYSIS AND RESULTS

Highways

The Final EA identified three highway segments with potential adverse effects for Tolling Scenario D, which was also representative of Tolling Scenarios E and F. Tolling Scenario D was used to represent the highest traffic increases for the highways around the Manhattan CBD and worst-case scenario. This reevaluation of the adopted toll structure identifies potential adverse effects at the same three highway segments, as discussed below. No additional mitigation is needed beyond the mitigation commitments of the Final EA.

For the reevaluation, seven highway segments screened in for further evaluation based on step 4 of the reevaluation methodology (see **Table 4B.1**). Of these, additional analysis identified potential adverse effects for the same three segments as described in the Final EA: Queens-Midtown Tunnel–Long Island Expressway (I-495), George Washington Bridge/Cross Bronx Expressway, and FDR Drive between East 10th Street and Brooklyn Bridge. **Table 4B.1** below compares the results of the screening analysis conducted in the Final EA to the results with the reevaluation.

Under both the adopted toll structure and the tolling scenario modeled in the Final EA, an adverse effect was found in one period on the Long Island Expressway (I-495) at the Queens-Midtown Tunnel, though the time periods differed and the potential effect under the adopted toll structure was smaller than shown in the Final EA. As shown in **Table 4B.1**, on the Long Island Expressway (I-495) at the Queens-Midtown Tunnel, the adopted toll structure would result in an adverse effect in the morning peak hour, with a delay of approximately 4 minutes (an increase in traffic volume of approximately 8.5 percent over the No Action Alternative). At this location under Tolling Scenario D, no adverse effect was predicted for the morning peak hour. During the midday peak hour, the Final EA showed an adverse effect with a delay of approximately 4 minutes and an increase in traffic volume of 15 percent over the No Action Alternative. This adverse effect would no longer occur with the adopted toll structure.

For the other two highway segments—the George Washington Bridge/Cross Bronx Expressway and FDR Drive between East 10th Street and Brooklyn Bridge—the effects would be reduced under the adopted toll structure when compared to the worst-case Tolling Scenario D in the Final EA. With the adopted toll structure, the traffic volume would be reduced by 124 vehicles per hour at the George Washington Bridge/Cross Bronx Expressway. With the adopted toll structure, the additional vehicles per hour on the FDR Drive between 10th Street and the Brooklyn Bridge would potentially be lower than all tolling scenarios evaluated in the Final EA. There would still be an adverse effect at both of those locations.

The mitigation presented in the Final EA would remain effective for each of these locations.

No adverse effects would occur at the other four highway segments with the adopted toll structure.

Table 4B.1 - Effects on Highway Segments in Final EA and Adopted Toll Structure

HIGHWAY SEGMENTS FOR ANALYSIS	FINAL EA: POTENTIAL ADVERSE EFFECTS*	ADOPTED TOLL STRUCTURE		
		FURTHER EVALUATION CONDUCTED	POTENTIAL ADVERSE EFFECTS	INTENSITY OF EFFECT
Lincoln Tunnel/NJ Route 495	No	No	No	
Holland Tunnel/I-78/NJ Route 138	No	No	No	
Westbound Long Island Expwy (I-495) near Queens-Midtown Tunnel	**Yes -** Midday	✓	**Yes -** AM	Delay of 4 minutes in the AM, comparable to the 4 minutes of delay in the midday in the Final EA; volume increase of 8.5% in the AM is less than the 15% in the midday in the Final EA
Hugh L. Carey Tunnel – Gowanus Expressway	No	✓	No	
Approaches to westbound George Washington Bridge on I-95	**Yes -** Midday	Qualitative	**Yes** - Midday	Incremental volume for the adopted toll structure (702 vehicles per hour [vph]) is lower than in the Final EA (826 vph)
Verrazzano-Narrows Bridge/Staten Island Expwy	No	No	No	
Northbound and southbound FDR Drive between E. 10th Street and Brooklyn Bridge	**Yes -** PM	Qualitative	**Yes -** PM	Incremental volume for the adopted toll structure (413 vph) is at the lower end of the range predicted in the Final EA across the seven tolling scenarios studied (404 vph – 666 vph)
Bayonne Bridge	No	✓	No	
Robert F. Kennedy Bridge	No	✓	No	
I-95 Eastern Spur	No	✓	No	

* See Table 4B-27 in the Final EA, page 4B-79.

✓ Quantified analysis completed at this location.

Local Intersections

In general, the Project would reduce traffic volumes and improve traffic flow. Because some traffic patterns would differ with variations in the toll structure, particularly the toll credits, redistribution of traffic at local intersections was analyzed. Based on the methodology for evaluation of local intersections, 14 of the 102 intersections had higher incremental volumes with the adopted toll structure than identified in the Final EA. Those 14 intersections were located in nine study areas. Thus, those nine study areas, with a total of 71 intersections, were reevaluated. In the nine study areas, further analysis demonstrated that only one of these intersections would have a potential adverse effect under the adopted toll structure, where the worst-case condition evaluated in the Final EA under Tolling Scenario D had four locations with potential adverse effects. The only location in the adopted toll structure that would exceed the impact criterion used for the analysis is at East 125th Street and Second Avenue in the Robert F. Kennedy Bridge Manhattan study

area during the PM peak hour, with a delay of 20.4 seconds. At this location, the Final EA identified adverse effects during both the AM and PM peak periods, with a delay of up to 52.2 seconds. The mitigation commitment described in the Final EA would remain effective at this location under the adopted toll structure.

In addition, the Final EA, using the worst-case condition of Tolling Scenario D, also identified adverse effects at three additional intersections that would no longer occur under the adopted toll structure.

Table 4B.2 compares the results predicted in the Final EA for local intersections to the results for the adopted toll structure. More information, including traffic volumes and detailed level-of-service analysis results, is provided in an appendix. Detailed analysis results are presented in Appendix 4B.

Table 4B.3 presents information from the Final EA Table ES-5 summarizing the conclusions related to traffic effects on highways and at local intersections, now modified to include the adopted toll structure.

Table 4B.2 - Effects on Local Intersections Final EA and Adopted Toll Structure

FINAL EA STUDY AREAS	FINAL EA		ADOPTED TOLL STRUCTURE						
	Potential Adverse Effects	Number of Intersections with Adverse Effect	ANALYSIS BASED ON SCREENING THRESHOLD** AM	Midday	PM	Late Night	Potential Adverse Effects	Number of Intersections with Adverse Effect	Intensity of Potential Effects
Bklyn Bridge/Manhattan Br–Downtown Brooklyn	No		✓			✓	No		
Hugh L. Carey Tunnel and Holland Tunnel–Lower Manhattan, Brooklyn Bridge, and Manhattan Bridge (impacts at one intersection)	Midday	1		☒		✓	No		
Hugh L. Carey Tunnel–Red Hook, Brooklyn	No		✓	✓		✓	No		
Holland Tunnel–Jersey City, NJ	No						No		
Lincoln Tunnel–Manhattan	No						No		
Ed Koch Queensboro Bridge–East Side at 60th St–Manhattan	No					✓	No		
West Side at 60th St–Manhattan	No						No		
Queens-Midtown Tunnel/Ed Koch Queensboro Bridge–Long Island City–Queens	No		✓			✓	No		
Queens-Midtown Tunnel–Murray Hill–Manhattan (impacts at two intersections)	**Yes:** Midday, Late Night	2 total: 1 Midday, 1 Late Night		☒		☒	No		
RFK Bridge–Manhattan	**Yes:** AM, PM	1 total (both AM and PM)	☒		☒	✓	**Yes:** PM	1	PM intersection delay increase of 20.4 seconds with the adopted toll structure, less than the 52.2-second delay increase predicted in the Final EA
RFK Bridge–Queens	No						No		
RFK Bridge–Bronx	No						No		
West Side Highway / Route 9A at West 24th St–Manhattan	No						No		
Lower East Side–Manhattan	No		✓	✓	✓	✓	No		
Little Dominican Republic–Manhattan	No		✓	✓	✓	✓	No		

* See Final EA Section 4B.6.3, "Environmental Consequences," and Table 4B-30 on page 4B-95.

** Intersection study areas screening thresholds for re-analysis:

✓ Study area / time period where the adopted toll structure has a higher traffic increment than the Final EA scenario analyzed

☒ Study area / time period where the Final EA identified potential adverse effect

FINDINGS

The analysis conducted for the reevaluation considered the effects of the adopted toll structure on traffic conditions on highways and at local intersections using the same methodology as used for the Final EA. With the adopted toll structure, potential adverse effects would occur on the same three highway segments as identified in the Final EA, but the forecasted traffic volumes at those locations under the adopted toll structure would be lower than the volumes evaluated in the Final EA. The same mitigation would be applied. No new mitigation is required. At local intersections, one intersection would have a potential adverse effect under the adopted toll structure, in comparison to four intersections identified in the Final EA. The effect at the location with the adverse effect would be lessened with the adopted toll structure and the proposed mitigation would remain effective. Therefore, the reevaluation demonstrates that the Final EA remains valid. With the adopted toll structure, the effects are within the range evaluated in the Final EA and no new adverse effects would occur. No additional mitigation is needed. The Project Sponsors remain committed to the mitigation described in the Final EA at the locations where potential adverse effects are predicted for the adopted toll structure.

Table 4B.3 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO A B C D E F G	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
4B – Transportation: Highways and Local Intersections	Traffic – Highway Segments	The introduction of the CBD Tolling Program may produce increased congestion on highway segments approaching on circumferential roadways used to avoid Manhattan CBD tolls, resulting in increased delays and queues in midday and PM peak hours on certain segments in some tolling scenarios: ▪ Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday) Approaches to westbound George Washington Bridge on I-95 (midday) ▪ Southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge (PM) ▪ Other locations will see an associated decrease in congestion particularly on routes approaching the Manhattan CBD	10 highway segments (AM)	Highway segments with increased delays and queues in peak hours that would result in adverse effects	0 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D)	Yes	**Mitigation needed.** The Project Sponsors will implement a monitoring plan prior to implementation with post-implementation data collected approximately three months after the start of tolling operations and including thresholds for effects; if the thresholds are reached or crossed, the Project Sponsors will implement TDM measures, such as ramp metering, motorist information, signage at all identified highway locations with adverse effects upon implementation of the Project. NYSDOT owns and maintains the relevant segments of the Long Island Expressway and I-95. The relevant segment of the FDR Drive is owned by NYSDOT south of Montgomery Street and NYCDOT north of Montgomery Street. Implementation of TDM measures will be coordinated between the highway owners and the owners of any assets relevant to implementing the TDM. Post-implementation of TDM measures, the Project Sponsors will monitor effects and, if needed, TBTA will modify the toll rates, crossing credits, exemptions, and/or discounts to reduce adverse effects.	AM - 1 out of 10 highway corridors (Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel); for some drivers, these increases will be offset by travel time savings within the CBD.	Yes	**No additional mitigation needed.** The Project Sponsors will implement the mitigation commitments of the Final EA.
			10 highway segments (midday)		2 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F			Midday - 1 out of 10 highway corridors (approaches to westbound George Washington Bridge on I-95); for some drivers, these increases will be offset by travel time savings within the CBD.		
			10 highway segments (PM)		1 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F			PM - 1 out of 10 highway corridors (southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge); for some drivers, these increases will be offset by travel time savings within the CBD.		
	Intersections	Shifts in traffic patterns, with increases in traffic at some locations and decreases at other locations, would change conditions at some local intersections within and near the Manhattan CBD. Of the 102 intersections analyzed, most intersections would see reductions in delay. Potential adverse effects on four local intersections in Manhattan: ▪ Trinity Place and Edgar Street (midday) ▪ East 36th Street and Second Avenue (midday) ▪ East 37th Street and Third Avenue (midday) ▪ East 125th Street and Second Avenue (AM, PM)	4 locations	Number of locations with potential adverse effects that will be addressed with signal timing adjustments	4 in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F	Yes	Mitigation needed. NYCDOT will monitor those intersections where potential adverse effects were identified and implement appropriate signal timing adjustments to mitigate the effect, per NYCDOT's normal practice. **Enhancement** Refer to the overall enhancement on monitoring at the end of this table.	Potential adverse effects at **1 location:** East 125th Street at Second Avenue (PM)	Yes	**No additional mitigation needed.** The mitigation commitment remains for East 125th Street at Second Avenue; for the other three locations identified in the Final EA, NYCDOT is maintaining the commitment to implement the measures identified in the Final EA as an enhancement.

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

4C Transportation – Transit

Subchapter 4C of the Final EA presented the assessment of the CBD Tolling Alternative on transit operations throughout the 28-county regional study area, including capacity of transit services (line-haul capacity) and effects on operations within individual transit stations. This section evaluates the effects of the adopted toll structure on the transit lines and stations. More detailed results of the analysis conducted for the reevaluation are provided in Appendix 4C.

METHODOLOGY

Final EA Methodology

As described in detail in the Final EA Section 4C.2, "Methodology and Assumptions," the Final EA analysis of transit used screening assessments followed by qualitative and/or quantified analyses conducted in coordination with the operating agency for the potentially affected transit service, consistent with evaluation procedures recommended in New York City's *City Environmental Quality Review (CEQR) Technical Manual*.

NYC's CEQR guidelines were used for analysis of New Jersey transit services (NJ TRANSIT, PATH, and suburban buses that enter the Manhattan CBD) because NJ TRANSIT and PANYNJ do not have alternative guidelines. In coordination with Metro-North Railroad and Long Island Rail Road, New York City Environmental Quality Review (CEQR) methodologies were also used to assess commuter rail lines and stations.

Line-Haul

Subways and Commuter Rail

1. Identified transit lines with more than 200 new peak-hour passengers in a single direction at maximum load point for the tolling scenario with the highest incremental transit ridership increase. The scenario with the highest incremental transit ridership increase for each subway and commuter rail line was used for the next steps in the analysis.
2. For transit lines above the 200-passenger screening threshold, evaluated the number of new passengers per train and car in the peak-hour.
3. Potential adverse effects were identified for any transit services where the Project increment would add more than 5 passengers per car and the service would operate above its guideline capacity (no subway or commuter rail lines exceeded this threshold in the Final EA, and there was no potential adverse effect on subways or commuter rail line-haul capacity).

Buses

1. Identified bus routes with more than 50 new passengers per hour, per direction, at maximum load point for the tolling scenario with the highest incremental transit ridership increase. The scenario

with the highest incremental transit ridership increase for each bus route cordon grouping was used for the next steps in the analysis.

2. For bus routes above the 50-passenger threshold, evaluated the number of incremental passengers per trip and calculated the volume-to-capacity (v/c) ratio that would result with the new passengers.

3. Potential adverse effects were identified for bus routes where the v/c ratio would be greater than 1.00, indicating that demand would be greater than capacity (no bus routes exceeded this threshold in the Final EA, and there were no potential adverse effects on bus line-haul capacity).

Stations

1. Identified transit stations with more than 200 new passengers in the peak hour for the tolling scenario with the highest incremental transit ridership increase (excluding cross-platform transfers between trains). Because Tolling Scenario E projected the highest transit system ridership, it was selected as the tolling scenario for detailed analysis of stations requiring further analysis (except at one location in Newark, New Jersey—for both PATH and NJ TRANSIT—where Tolling Scenario C was selected for its greater station ridership increase).
2. For transit stations above the 200-passenger screening threshold, conducted qualitative analysis of station, or quantified analysis of effect on station elements (stairs, escalators, passageways, turnstiles, and fare arrays), in coordination with the station operator.

Reevaluation Methodology

Line-Haul

1. Identified incremental passenger increases from the adopted toll structure at maximum load points for subway, commuter rail, and bus lines.
2. Identified lines with higher increment than Final EA tolling scenario analyzed at those locations.
3. Using the same methodology as the Final EA, conducted analysis for lines where both:
    - Increments met CEQR screening threshold for analysis (200 new peak-hour passengers for subways and commuter rail; 50 new passengers per hour, per direction, at maximum load point for buses)
    - Increments were higher than the Final EA

   If the line met the screening threshold for increased passengers, but the increase was less than that where no adverse effects were found after detailed analysis in the Final EA, then no further detailed analysis was necessary.

Stations

1. Identified incremental passenger increases from the adopted toll structure at transit stations.
2. Using the same methodology as in the Final EA, identified transit stations with more than 200 new passengers in the peak hour due to the adopted toll structure (excluding cross-platform transfers between trains).

3. Using the same methodology as the Final EA, conducted analysis for stations where both:
    - Increments met CEQR screening threshold for analysis
    - Increments were higher than the Final EA

    If the station met the screening threshold for increased passengers, but the increase was less than that where no adverse effects were found after detailed analysis in the Final EA, then no further detailed analysis was necessary.

ANALYSIS AND RESULTS

The analysis of the adopted toll structure concludes that the total change in AM peak-period transit boardings systemwide is within the range of results for tolling scenarios evaluated in the Final EA/FONSI as shown in **Table 4C.5**.[3] The BPM results for the adopted toll structure show an increase of 0.3 percent over Tolling Scenario C (the worst-case scenario evaluated) for the Roosevelt Island Tramway and otherwise the results are comparable to those assessed in the Final EA. At a more refined level, as shown in modified **Table 4C.1** below, the adopted toll structure would result in slightly lower total subway, bus, and commuter rail boardings in the AM peak period than analyzed in the Final EA Tolling Scenario E (with 6,431,493 in the adopted toll structure compared with 6,454,147 with Tolling Scenario E, the scenario with highest overall transit boardings). Passenger boardings in the AM peak period on Metro-North Railroad systemwide with the adopted toll structure would exceed boardings with Tolling Scenario E slightly, by 52 boardings systemwide. However, Tolling Scenarios D and F had 502 and 672 boardings on Metro-North Railroad, respectively, more than the adopted toll structure. For total transit boardings, the Final EA reported more boardings in Tolling Scenarios C, D, E, F, and G than the adopted toll structure. **Table 4C.1** below provides a comparison of total transit ridership by mode in the AM peak four-hour period for the Final EA tolling scenarios and the adopted toll structure.

Line-Haul

Considering the effect of the adopted toll structure on individual subway and commuter rail lines, the adopted toll structure would result in incremental passenger volumes above the screening threshold on one commuter rail line: the Metro-North Railroad New Haven Line (see **Table 4C.2**). The tolling scenarios evaluated in the Final EA, Tolling Scenarios A through G, had 1 to 10 lines that exceeded this screening threshold. Tolling Scenario E was the representative scenario used for this analysis, with the highest ridership and 10 lines exceeding the threshold. On the Metro-North Railroad New Haven Line, the adopted toll structure would result in 437 additional peak-hour passengers (over the No Action), in comparison to 212 new passengers evaluated in the Final EA (Tolling Scenario E). Overall, the increase on the New Haven Line due to the adopted toll structure would be equivalent to 2.6 new passengers per train car, which is

[3] The use of a transit system (buses, rail, subways, etc.) or its ridership is typically defined by passengers boarding onto its transit vehicles. Accordingly, the number of passengers boarding a system is used by transportation models to measure or project its ridership. In certain instances, such as measuring line-haul capacity (i.e., capacity of a system to handle passenger demand at a certain point on the system), passengers on the system (i.e., ridership) is considered instead.

lower than the CEQR threshold of five additional passengers per train car. Therefore, the adopted toll structure would not result in adverse effects on line-haul capacity on the New Haven Line.

The adopted toll structure results are within the range of the scenarios evaluated in the Final EA/FONSI for bus routes, except for one route where its ridership would exceed ridership with Tolling Scenario D by 0.5 percent (Table 4C.5). For bus routes, the 13 New Jersey/West of Hudson bus lines (via Holland Tunnel) would see an overall 1.9 percent increase in passengers at the maximum load point with the adopted toll structure, compared to a range of -1.4 to 1.4 percent change in passengers for the Final EA tolling scenarios. The maximum increase per-direction at the maximum load point on a single line was 8 new riders, which is lower than the CEQR threshold of 50 new riders. Therefore, the adopted toll structure would not result in adverse effects on line-haul capacity on any West of Hudson bus lines.

The Roosevelt Island Tramway would have three more riders under the adopted toll structure than with Tolling Scenario E. Although the adopted toll structure would result in a 2.9 percent increase in ridership on the tramway over the No Action condition, the ridership increment is minimal and would not result in adverse effects on the line-haul capacity of the tramway.

Table 4C.1 - Modified Final EA Table 4C-6. Transit Ridership: No Action Alternative and CBD Tolling Alternative (2023 AM Peak Period) – with the Adopted Toll Structure Added

MODE	NO ACTION ALTERNATIVE	TOLLING SCENARIO A	TOLLING SCENARIO B	TOLLING SCENARIO C	TOLLING SCENARIO D	TOLLING SCENARIO E	TOLLING SCENARIO F	TOLLING SCENARIO G	ADOPTED TOLL STRUCTURE
Subway	**3,138,960**	**3,184,961**	**3,187,374**	**3,192,428**	**3,199,370**	**3,203,052**	**3,199,783**	**3,197,389**	**3,190,362**
New York City Transit	3,005,224	3,050,101	3,052,683	3,056,840	3,063,552	3,066,614	3,063,577	3,061,455	3,054,862
Port Authority Trans-Hudson (PATH)	133,736	134,860	134,691	135,588	135,818	136,438	136,206	135,934	135,500
Commuter and Intercity Rail	**454,520**	**456,755**	**457,863**	**459,632**	**461,634**	**463,108**	**462,013**	**458,867**	**459,622**
Long Island Rail Road	142,651	143,452	143,989	144,244	144,733	145,544	144,560	144,084	144,103
Metro-North Railroad	152,203	153,128	153,437	154,108	154,850	154,296	155,020	153,491	154,348
NJ TRANSIT	159,666	160,175	160,437	161,280	162,051	163,268	162,433	161,292	161,171
Buses	**2,689,564**	**2,718,960**	**2,717,506**	**2,724,787**	**2,724,456**	**2,727,512**	**2,726,657**	**2,718,457**	**2,721,174**
MTA buses	2,037,319	2,063,136	2,062,997	2,068,001	2,067,753	2,069,107	2,068,898	2,062,926	2,064,522
NJ TRANSIT	471,109	474,344	473,456	474,079	474,279	476,321	475,663	474,260	475,149
Other	181,136	181,480	181,053	182,707	182,424	182,084	182,096	181,271	181,503
Other Transit	**58,635**	**60,073**	**60,225**	**60,467**	**60,474**	**60,475**	**60,712**	**60,246**	**60,335**
Ferries	57,548	58,966	59,120	59,358	59,363	59,360	59,598	59,140	59,216
Tramway	1,087	1,107	1,105	1,109	1,111	1,115	1,114	1,106	1,118
TOTAL	**6,341,679**	**6,420,749**	**6,422,968**	**6,437,314**	**6,445,934**	**6,454,147**	**6,449,165**	**6,434,959**	**6,431,493**

Source: WSP, Best Practice Model 2023, 2021 and the New York Metropolitan Transportation Council (NYMTC) Hub Bound Travel Data Report 2019.

Note: Data total over a 4-hour period, defined as total boardings, which include transfers. (Because this ridership estimate includes transfers, the ridership reported is greater than MTA NYCT MetroCard data that is widely available.) The BPM includes MTA buses, NJ TRANSIT buses, smaller regional bus carriers, and private carriers. (Other smaller carriers and private carriers are included under "Other Buses.") Tramway volumes were calculated using an incremental change factor derived from Queens/Roosevelt Island sector change per each tolling scenario.

Table 4C.2 – Transit Lines Triggering Detailed Line-Haul Analysis and Average Incremental Increase Across Tolling Scenarios (AM Peak Hour) – with Adopted Toll Structure Added

TOLLING SCENARIO	PORT AUTHORITY TRANS-HUDSON (PATH)		NEW YORK CITY TRANSIT SUBWAY		COMMUTER RAIL		BUS		TOTAL
	Number of Lines Exceeding Threshold	Average Incremental Ridership Increase	Number of Lines Exceeding Threshold	Average Incremental Ridership Increase	Number of Lines Exceeding Threshold	Average incremental Ridership Increase	Number of Lines Exceeding Threshold	Average Incremental Ridership Increase	Number of Lines Exceeding Threshold
A	0	—	1	290	0	—	0	—	**1**
B	0	—	1	231	2	296	0	—	**3**
C	0	—	3	244	1	376	0	—	**4**
D	0	—	5	248	3	315	0	—	**8**
E	1	234	5	265	4	282	0	—	**10**
F	0	—	7	249	3	326	0	—	**10**
G	1	242	1	235	1	232	0	—	**3**
Adopted Toll Structure	0	—	0	—	1	437	0	—	**1**

Source: WSP, Best Practice Model

Note: Average incremental ridership increase is the average increase in passengers among lines with hourly passenger increments over the 200 passenger threshold. Following CEQR guidance, subway and commuter rail lines with a projected net hourly increase of 200 or more passengers require detailed line-haul analysis. Bus lines with a projected net hourly increase of 50 or more passengers also require detailed line-haul analysis.

Stations

The passenger volumes within transit stations predicted for the adopted toll structure were lower than the volumes for the worst-case tolling scenarios reported in the Final EA/FONSI except at three stations, Grand Central Terminal, Court Square Station, and Main Street-Flushing station, discussed below in more detail.

In the Final EA, the initial screening evaluation conducted for the Final EA concluded that 26 commuter rail and subway stations were projected to have passenger increases of more than the screening threshold of 200 new peak-hour passengers across all tolling scenarios (see Final EA Subchapter 4C, Section 4C.4.2.5, page 4C-46). Tolling Scenario E had the highest number of stations exceeding the 200-passenger threshold, with 23 stations, and Tolling Scenarios B and G had the least, both with 18 stations exceeding the screening threshold (see Final EA Table 4C-10 and Table 4C.3). During preparation of the Final EA, the Project Sponsors then consulted with the station operators, which evaluated the potential increases in the context of recent or planned station improvements, station size, and other factors. As a result of that consultation, four station complexes were evaluated qualitatively in the Final EA and found to have no adverse effects due to the Project:

- Grand Central Terminal (subway and commuter rail station)
- Port Authority Bus Terminal (bus and subway station)
- Penn Station New York (commuter rail and subway station)
- Fulton Transit Center (subway station)

The remaining stations were evaluated quantitatively for the Final EA, with analysis of the CBD Tolling Alternative's effects on station elements (stairs and escalators, passageways, and turnstiles / fare arrays).

In the reevaluation for the adopted toll structure, the initial screening evaluation concluded that with the adopted toll structure, three stations would have passenger increases of more than the screening threshold—i.e., more than 200 new peak-hour passengers and higher than Final EA Tolling Scenario E: Grand Central Terminal, Court Square Station, and Main Street–Flushing Station (see **Table 4C.3**). These locations were then evaluated using the same approach as in the Final EA: qualitative analysis for Grand Central Terminal (for which the Final EA identified no adverse effect) and quantitative analysis for Court Square and Main Street–Flushing Stations (for which the Final EA identified adverse effects). More detailed results of the analysis conducted for the reevaluation for the adopted toll structure are provided in **Appendix 4C**. The results of this analysis were as follows (see also **Tables 4C.3 and 4C.4**):

- **Grand Central Terminal (Metro-North Railroad, No. 4, 5, 6, 7 and S subway lines)**:
  - The adopted toll structure had a 3 percent (18 more passengers) higher passenger volume than Final EA Tolling Scenario E.
  - Considering planned and under-construction capacity improvements, and the modest change as compared to the Final EA, this increase would result in the same conclusion of no new adverse effects.
- **Flushing-Main Street station (No. 7 subway line):**
  - The adopted toll structure had a 10 percent (27 more passengers) higher passenger volume than Final EA Tolling Scenario E.
  - The Final EA identified a potential adverse effect at street escalator 456. The Final EA's proposed mitigation of increasing the escalator speed would mitigate the adverse effect. The adopted toll structure would also have a potential adverse effect at this station; this would also be mitigated by the increase in escalator speed. There are no new adverse effects.
- **Court Square station (No. 7, E/M, and G subway lines):**
  - The adopted toll structure had a 2 percent (5 more passengers) higher passenger volume than Final EA Tolling Scenario E.
  - The Final EA identified a potential adverse effect at platform stair Flushing P2/P4. The Final EA's proposed mitigation – constructing a new stair from the northern end of the No. 7 platform to the street – would mitigate the potential adverse effect. With the adopted toll structure, there would also be an adverse effect and this would be mitigated by the new stair. There are no new adverse effects.

At other stations where the Final EA predicted adverse effects (using Tolling Scenario E), the adopted toll structure would result in lower incremental volumes than evaluated in the Final EA in Tolling Scenario E—the Hoboken PATH Station (Tolling Scenario E, 316 in AM peak hour; adopted toll structure, 141 in AM peak hour), Union Square Station (Tolling Scenario E, 585 in AM peak hour; adopted toll structure, 450 in AM

peak hour), and 42nd Street–Times Square Station (Tolling Scenario E, 790 in AM peak hour; adopted toll structure, 474 in AM peak hour).

At Hoboken Terminal, the reevaluation analysis indicated that the adopted toll structure would result in volumes that are 45 to 50 percent of the Final EA Tolling Scenario E increments. This would result in a stair volume of 141 and 152 incremental passengers in the AM and PM peak hours, respectively, and no adverse effect would occur. The mitigation measures identified in the Final EA and FONSI will be implemented as an enhancement (as indicated in Table 4C.5 below).

At the Union Square Station, the adopted toll structure would have 316 to 367 fewer incremental passengers in the AM and PM peak hours, respectively, than Tolling Scenario E. At the Times Square Station, the adopted toll structure would have 135 to 145 fewer passengers in the AM and PM peak hours, respectively, compared with Tolling Scenario E. With both these stations having lower increments under the adopted toll structure than Tolling Scenario E analyzed in the Final EA, adverse effects would be less than what was expected under Tolling Scenario E. These adverse effects would be adequately addressed by the mitigation measures described in the Final EA and FONSI. No additional mitigation would be required.

Table 4C.5 presents information from the Final EA Table ES-5 summarizing the conclusions related to transit effects, now modified to include the adopted toll structure.

FINDINGS

The change in transit ridership with the adopted toll structure would fall within the range predicted for the tolling scenarios evaluated in the Final EA. Final EA Tolling Scenario E had the highest predicted increase in transit ridership of all the tolling scenarios evaluated. Ridership during the AM peak period with the adopted toll structure would exceed that of Tolling Scenario E slightly on the Metro-North New Haven Line; however, it would be lower than with Tolling Scenarios D and F on this route.

For the 13 New Jersey/West of Hudson bus lines (via Holland Tunnel) collectively, the adopted toll structure would result in an increase in passengers of 1.9 percent at the maximum load point during the AM peak period. The range for these routes in the Final EA/FONSI was -1.4 to 1.4 percent. The maximum predicted increase per-direction at the maximum load point on a single line for the adopted toll structure is 8 new riders, which is lower than the CEQR threshold of 50 new riders on a single line. Therefore, there is no adverse effect.

For the Roosevelt Island Tramway, the adopted toll structure would result in a 2.9 percent increase in passengers during the peak period over the No Action Alternative. However, the ridership increment is just three more passengers than Tolling Scenario E, which had no adverse effect. This is a small variation from what was evaluated in the Final EA, so there is no adverse effect.

The increase in passengers at stations with the adopted toll structure would be lower than or within the range evaluated in the Final EA/FONSI except at three stations. The additional volume at these stations would exceed the volumes with Tolling Scenario E by 5 to 27 passengers. This is a small variation from what

was evaluated in the Final EA/FONSI and would not result in any new adverse effects. Passenger volumes at Hoboken Terminal with the adopted toll structure would drop below the screening threshold for adverse effect, so there is no longer an adverse effect at that location with the adopted toll structure. The remaining adverse effects found in the Final EA/FONSI remain valid. The Project Sponsors remain committed to the mitigation described in the Final EA and FONSI.

Table 4C.3 - Modified Final EA Table 4C-26 & Table 4C-27. Transit Stations with More than 200 Projected New Passengers in the AM and PM Peak Hour (2023), Final EA Tolling Scenario E or C – with the Adopted Toll Structure Added

STATION NAME	OPERATOR	LINE	FINAL EA – TOLLING SCENARIO E OR C		ADOPTED TOLL STRUCTURE	
			AM Peak Net Ons/Offs	PM Peak Net Ons/Offs	AM Peak Net Ons/Offs	PM Peak Net Ons/Offs
New York-Penn Station	LIRR/NJ TRANSIT	—	1,380	1,380	680	680
New York-Grand Central Terminal	Metro-North	—	619	619	637	637
Hoboken Terminal	NJ TRANSIT	—	501	501	122	122
Hoboken Terminal (PATH)	PANYNJ	—	316	340	141	141
World Trade Center Station	PANYNJ	—	264	285	157	210
Times Sq-42 St/42 St-Port Authority Bus Terminal	NYCT	Nos. 1, 2, 3, 7, and A, C, E, N, Q, R, S, W	790	851	474	484
Grand Central-42 St	NYCT	Nos. 4, 5, 6, 7, and S	761	820	475	512
14 St-Union Square	NYCT	Nos. 4, 5, 6, and L, N, Q, R, W	585	630	450	485
Fulton St	NYCT	Nos. 2, 3, 4, 5, and A, C, J, Z	495	533	333	358
Lexington Av/59 St	NYCT	Nos. 4, 5, 6, and N, R, W	455	490	373	401
Lexington Av/53 St and 51 St	NYCT	No. 6, and E, M	395	425	285	307
42 St-Bryant Park-5 Av	NYCT	No. 7, and B, D, F, M	342	369	218	235
Broadway-Lafayette St and Bleecker St	NYCT	No. 6, and B, D, F, M	341	368	246	265
Court Square	NYCT	No. 7, and E, G, M	332	354	337	363
59 St-Columbus Circle	NYCT	No. 1, and A, B, C, D	326	351	222	239
Atlantic Av-Barclays Center	NYCT	Nos. 2, 3, 4, 5, and B, Q, D, N, R	313	338	280	301
34 St-Herald Sq	NYCT	B, D, F, M, N, Q, R, W	319	344	205	221
14 St (Sixth Av/Seventh Av)	NYCT	Nos. 1, 2, 3, and F, M, L	268	288	234	252
Flushing-Main St	NYCT	7	261	281	288	310
Broadway Junction	NYCT	Nos. 1, 2, 3, and F, M, L	245	264	222	239
Canal St	NYCT	No. 6, and N, Q, R, W, J	230	247	170	183
168 St-Washington Heights	NYCT	No. 1, and A, C	204	219	162	174

Source: WSP, Best Practice Model.

Note: All stations with free connections have aggregated volumes. Peak-hour incremental change was calculated as an average 28 percent peak-hour to peak-period ratio in the PM for NYCT subways, PATH trains, and buses; 43 percent peak-hour to peak-period ratio for Metro-North and NJ TRANSIT; and 41 percent peak-hour to peak-period ratio for LIRR. Net ons/offs include subway-to-bus, subway-to-subway, and bus-to-subway transfers and is not a direct calculation of Tolling Scenario E (the scenario with the highest overall ridership) minus No Action Alternative incremental trips. Tolling Scenario C was used for analysis at Hoboken Terminal because it had higher ridership than Tolling Scenario E at Hoboken Terminal.

Table 4C.4 - Modified Final EA Table 4C-34. NYCT Station Elements Where Adverse Effects and Accompanying Project Improvements Have Been Identified (CBD Tolling Alternative, 2023 AM Peak Hour) – with Adopted Toll Structure and Mitigation Added

STATION	ELEMENT	NO ACTION ALTERNATIVE			FINAL EA (SCENARIO E)			ADOPTED TOLL STRUCTURE			WITH MITIGATION				IDENTIFIED MITIGATION
											FINAL EA (SCENARIO E)		ADOPTED TOLL STRUCTURE		
		AM Peak-Hour Volume	V/C Ratio	Level of Service	AM Peak-Hour Volume	V/C Ratio	Level of Service	AM Peak-Hour Volume	V/C Ratio	Level of Service	V/C Ratio	Level of Service	V/C Ratio	Level of Service	
Flushing – Main Street	**Escalator E456**: Street escalator at north side of Roosevelt Avenue between Main Street and Union Street	2,984	1.18	D	3,040	1.21	D	3,045	1.21	D	1.08	D	1.08	D	Increase escalator speed to 120 feet per minute.
Court Square	**Stair P2/P4:** Stair between paid zone and Manhattan-bound No. 7 train	3,825	1.84	F	3,955	1.90	F	3,947	1.90	F	1.56	E	1.56	E	Construct new stair from the northern end of No. 7 platform to the street.

Note: Highlighted columns show with-mitigation service levels, these were not included in Table 4C-35 in the Final EA.

Table 4C.5 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4C – Transportation: Transit	Transit Systems	The Project would generate a dedicated revenue source for investment in the transit system. Transit ridership would increase by 1 to 2 percent systemwide for travel to and from the Manhattan CBD, because some people would shift to transit rather than driving. Increases in transit ridership would not result in adverse effects on line-haul capacity on any transit routes.	New York City Transit	% Increase or decrease in total AM peak period boardings systemwide	1.5%	1.6%	1.7%	1.9%	2.0%	1.9%	1.8%	No	**No mitigation needed.** No adverse effects	1.7%	No	**No mitigation needed.** No adverse effects
			PATH		0.8%	0.7%	1.4%	1.6%	2.0%	1.8%	1.6%			1.3%		
			Long Island Rail Road		0.6%	0.9%	1.1%	1.5%	2.0%	1.3%	1.0%			1.0%		
			Metro-North Railroad		0.6%	0.8%	1.3%	1.7%	1.4%	1.9%	0.8%			1.4%		
			NJ TRANSIT commuter rail		0.3%	0.5%	1.0%	1.5%	2.3%	1.7%	1.0%			0.9%		
			MTA/NYCT Buses		1.3%	1.3%	1.5%	1.5%	1.6%	1.6%	1.2%			1.3%		
			NJ TRANSIT Bus		0.7%	0.5%	0.6%	0.7%	1.1%	1.0%	0.7%			0.9%		
			Other buses (suburban and private operators)		0.2%	0.0%	0.9%	0.7%	0.5%	0.5%	0.1%			0.2%		
			Ferries (Staten Island Ferry, NYC Ferry, NY Waterway, Seastreak)		2.5%	2.7%	3.1%	3.2%	3.1%	3.6%	2.7%			2.9%		
			Roosevelt Island Tram		1.8%	1.7%	2.0%	2.2%	2.6%	2.5%	1.7%			2.9%		
	Bus System Effects	Decreases in traffic volumes within the Manhattan CBD and near the 60th Street boundary of the Manhattan CBD would reduce the roadway congestion that adversely affects bus operations, facilitating more reliable, faster bus trips.	Manhattan local buses	% Increase or decrease at maximum passenger load point	0.5%	0.5%	0.7%	1.1%	1.2%	0.9%	0.7%	No	**No mitigation needed.** No adverse effects	0.5%	No	**No mitigation needed.** No adverse effects
			Bronx express buses		-1.6%	2.0%	2.2%	-0.5%	2.0%	1.5%	-2.5%			0.6%		
			Queens local and express buses (via Ed Koch Queensboro Bridge)		2.2%	2.0%	2.3%	2.3%	2.5%	2.8%	2.0%			2.2%		
			Queens express buses (via Queens-Midtown Tunnel)		0.3%	0.2%	0.4%	0.8%	1.1%	0.8%	0.6%			0.5%		
			Brooklyn local and express buses		0.8%	1.0%	0.6%	0.7%	0.7%	0.8%	2.6%			0.5%		
			Staten Island express routes (via Brooklyn)		4.0%	4.5%	4.4%	3.8%	3.9%	3.7%	3.5%			3.9%		
			Staten Island express routes (via NJ)		1.0%	1.9%	2.3%	2.8%	1.8%	1.8%	2.4%			1.3%		
			NJ/West of Hudson buses (via Holland Tunnel)		-1.4%	-0.9%	-0.3%	1.4%	-0.9%	-0.6%	-1.4%			1.9%		
			NJ/West of Hudson buses (via Lincoln Tunnel)		0.4%	0.6%	0.4%	0.6%	1.5%	1.1%	0.6%			0.8%		

Table 4C.5 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4C – Transportation: Transit (Cont'd)	Transit Elements	Increased ridership would affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations: ▪ Hoboken Terminal, Hoboken, NJ PATH station ▪ Times Sq-42 St/42 St-Port Authority Bus Terminal subway station in the Manhattan CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines) ▪ Flushing-Main St subway station, Queens (No. 7 line) ▪ 14th Street-Union Square subway station in the Manhattan CBD (Nos. 4, 5, and 6; and L, N, Q, R, W lines) ▪ Court Square subway station, Queens (No. 7 and E, G, M lines)	Hoboken Terminal–PATH station (NJ) Stair 01/02	Net passenger increases at stair in the peak hour vs. No Action Alternative	45	72	122	164	240	205	139	Yes	**Mitigation needed for Tolling Scenarios E and F.** TBTA w ll coordinate with NJ TRANSIT and PANYNJ to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after implementation shows an incremental change that is greater than or equal to 205, then TBTA will coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.	140	No	**No mitigation needed.** TBTA is maintaining its commitment to implement the mitigation measures identified in the Final EA, including monitoring and improvements, if warranted, as an enhancement.
			42 St-Times Square–subway station (Manhattan) Stair ML6/ML8 connecting mezzanine to uptown 1/2/3 lines subway platform	Net passenger increases at stair in the peak hour vs. No Action Alternative	45	42	48	58	71	58	40	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	43	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Flushing-Main St subway station (Queens)–Escalator E456 connecting street to mezzanine level	Net passenger increases at stair in the peak hour vs. No Action Alternative	65	51	60	65	56	74	40	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the speed from 100 feet per minute (fpm) to 120 fpm.	61	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Union Sq subway station (Manhattan)–Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 line mezzanine	Net passenger increases at stair in the peak hour vs. No Action Alternative	14	19	20	23	23	22	14	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the escalator speed from 100 fpm to 120 fpm.	18	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.
			Court Sq subway station (Queens)–Stair P2/P4 to Manhattan-bound No. 7 line	Net passenger increases at stair in the peak hour vs. No Action Alternative	127	117	133	135	130	152	126	Yes	**Mitigation needed.** TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	122	Yes	**No additional mitigation needed.** TBTA will coordinate with MTA NYCT to implement the mitigation commitments of the Final EA, including monitoring and improvements, if warranted.

4D Transportation – Parking

Subchapter 4D of the Final EA presented the assessment of the CBD Tolling Alternative's potential effect on parking conditions, including curbside parking (on-street parking) and parking lots and garages (off-street parking) serving transit stations and transit hubs where potential increases in transit ridership could increase the demand for parking. This section reevaluates those effects for the adopted toll structure.

METHODOLOGY

Final EA Methodology

The methodology used to evaluate the Project's effect on parking conditions is described in the Final EA in Subchapter 4D, Section 4D.2, "Methodology." As detailed there, the methodology included the following:

1. Used BPM output to identify groupings of transit stations and hubs where the CBD Tolling Alternative (any tolling scenario) would result in more than 50 new vehicles in the peak hour.
2. For groupings of transit stations and hubs from Step 1, calculated the average increase per station within the grouping to identify individual stations where the CBD Tolling Alternative would result in more than 50 new vehicles per hour, since that level of new vehicle trips could be large enough to result in a corresponding increase in demand for parking spaces nearby.
3. For stations and hubs from Step 2, conducted detailed analysis to identify effects (this was not needed for any location).
4. For stations and hubs from Step 3, identified mitigation for any potential adverse effects (this was not needed for any location).

Reevaluation Methodology

The same methodology used in the Final EA was followed for the reevaluation. As with the Final EA, the later steps of detailed analysis and identifying mitigation were not needed for any location because no locations were identified where demand would increase by 50 or more vehicles in the peak hour as the result of the adopted toll structure.

ANALYSIS AND RESULTS

The analysis in the Final EA concluded that all tolling scenarios would decrease vehicle trips to the Manhattan CBD with a corresponding increase in transit trips. With the adopted toll structure, the number of daily Manhattan CBD-related journeys (i.e., round trips) by transit mode is projected to increase by 1.7 percent, within the range studied in the Final EA (as shown in Table 4A-10 on page 4A-17, increases would range from 1.2 percent to 2.5 percent for the tolling scenarios evaluated). **Table 4D.1** presents the CBD-related transit journeys for the Final EA tolling scenarios in comparison to the adopted toll structure.

Table 4D.1 - Modified Final EA Table 4A-10. Daily Manhattan CBD-Related Transit Journeys (compared to No Action Alternative) by Tolling Scenario (2023) – With the Adopted Toll Structure Added

NO ACTION	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
1,833,770	1,856,016	1,856,487	1,864,633	1,874,509	1,878,700	1,872,355	1,860,737	1,864,947
Difference	22,246	22,717	30,863	40,739	44,930	38,585	26,967	31,177
Percentage	1.2%	1.2%	1.7%	2.2%	2.5%	2.1%	1.5%	1.7%

The Final EA described that the predicted increase in transit trips to the Manhattan CBD in the worst-case tolling scenario evaluated would result in an increase in vehicle trips to commuter rail and park-and-ride facilities, with smaller increases at other transit stations. The analysis in the Final EA concluded that the increase in commuters at individual stations or park-and-ride facilities would be distributed throughout the region, and no individual stations would have increases in vehicle trips of 50 or more vehicles in the peak hour for any tolling scenario. As shown in Table 4D.2, in the representative tolling scenario evaluated in the Final EA, Tolling Scenario E (the scenario with the most transit journeys), 10 station groups (7 commuter rail and 3 subway) were predicted to have increases of 50 or more peak-hour vehicle trips, with vehicle trips at individual stations ranting from 14 to 32 vehicles. Therefore, the Final EA concluded that no adverse effect on parking conditions would occur at locations in the regional study area. While additional parking demand may occur at transit facilities that have no available capacity, this level of increase would not constitute an adverse effect.

With the adopted toll structure, BPM results indicate that, as with the Final EA tolling scenarios, the predicted increase in vehicle trips to commuter rail stations, park-and-ride facilities, and other transit stations would be distributed throughout the region and no individual stations would have 50 or more new peak-hour vehicle trips. Table 4D.2 provides information on the station groupings that would have more than 50 new peak-hour vehicle trips, and the resulting peak-hour trips per station within each grouping. Four station groups (the same three subway station groups identified for Tolling Scenario E and one new commuter rail group not identified for Tolling Scenario E) would have 50 or more new peak-hour vehicle trips, with vehicle increases at individual stations ranging from 15 to 27 for the adopted toll structure. There would be vehicle and parking demand increases in the peak hour for the adopted toll structure compared to Tolling Scenario E at the Metro-North Railroad Inner New Haven Line station group and the Fourth Avenue Brooklyn D/N/R Line subway station group. The projected increases at those two station groups would similarly not exceed the threshold of 50 vehicles per station. Therefore, the conclusions of the Final EA related to parking at transit facilities outside the Manhattan CBD remain valid.

Table 4D.2 - Groupings of Transit Stations with More than 50 New Peak-Hour Vehicle Trips, Final EA and Adopted Toll Structure

STATION GROUPING / STATIONS IN GROUP	FINAL EA (TOLLING SCENARIO E)		ADOPTED TOLL STRUCTURE	
	New Peak Hour Trips per Group	New Peak Hour Trips per Station	New Peak Hour Trips per Group	New Peak Hour Trips per Station
Commuter Rail Stations				
LIRR Massapequa Park–Babylon Group (5 stations)	141	28	—	—
LIRR Carle Place–Hicksville Group (3 stations)	96	32	—	—
LIRR Merrick–Massapequa Park Group (5 stations)	101	20	—	—
NJT Port Jervis Group (8 stations)	147	18	—	—
NJT Northeast Corridor Central Group (5 stations)	108	22	—	—
MNR Upper Hudson/Dutchess Group (3 stations)	82	27	—	—
MNR Inner Harlem Lower Group (5 stations)	125	25	—	—
MNR Inner New Haven Line Group (5 stations)	—	—	75	15
Subway Stations				
Queens Blvd, Queens E/F Line Group (3 stations)	83	28	60	20
Court Sq, Queens 7/E/G/M Line Group (3 stations)	82	27	81	27
Fourth Ave, Brooklyn D/N/R Line Group (6 stations)	83	14	94	16

Notes: LIRR = Long Island Rail Road; MNR = Metro-North Railroad, NJT = NJ TRANSIT
— indicates that station group would not result in 50 or more new vehicles in the peak hour.

The Final EA also noted that the BPM did not predict increases in vehicle traffic in neighborhoods close to, but outside, the Manhattan CBD as might occur if drivers sought parking there to avoid the toll, but that this behavior might occur on a short-lived basis as part of the adjustment process. If parking demand exceeds supply in the areas close to the CBD boundary, this would not result in adverse effects using the CEQR methodology for parking analyses, which does not consider parking shortfalls in those areas to be adverse effects. The same conclusions remain true for the adopted toll structure.

The MTA Reform and Traffic Mobility Act states that the City of New York must monitor the effects of the Project on parking within and around the Manhattan CBD, and a report must be completed 18 months after the Project commences. A parking study is being led by NYCDOT and work collecting pre-implementation baseline data is under way.

Table 4D.3 presents information from the Final EA Table ES-5 summarizing the conclusions related to parking conditions, now modified to include the adopted toll structure

FINDINGS

The reevaluation used data from the BPM for the adopted toll structure to assess the potential for effects on parking conditions, and compared the results to the effects presented in the Final EA. BPM results for the adopted toll structure indicate that the predicted increase in vehicle trips to commuter rail stations, park-and-ride facilities, and other transit stations would be within the range evaluated in the Final EA, and the demand for parking would also be lower than the worst case, Scenario E, evaluated in the Final EA except at two station groups. The projected increases at those two station groups would not exceed the threshold of 50 vehicles per station and there would not be an adverse effect. Therefore, the analysis demonstrates that the effects of the adopted toll structure would be within the range evaluated in the Final EA and the Final EA remains valid. No adverse effects would occur and no mitigation would be required.

Table 4D.3 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO A B C D E F G	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
4D – Transportation: Parking	Parking Conditions	All tolling scenarios would result in a reduction in parking demand within the Manhattan CBD of a similar magnitude to the reduction in auto trips into the Manhattan CBD. With a shift from driving to transit, there would be increased parking demand at subway and commuter rail stations and park-and-ride facilities outside the Manhattan CBD.	Manhattan CBD	Narrative	Reduction in parking demand due to reduction in auto trips to CBD Model results do not indicate an increase in demand for parking in the area immediately surrounding the CBD	No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects
			Transit Facilities	Narrative	Small changes in parking demand at transit facilities, corresponding to increased commuter rail and subway ridership	No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

4E Transportation – Pedestrians and Bicycles

Subchapter 4E of the Final EA presented the assessment of the CBD Tolling Alternative's potential effects on pedestrian circulation; bicycle routes and bicycle infrastructure; and vehicular, pedestrian, and bicycle safety. This section reevaluates those topics for the adopted toll structure.

METHODOLOGY

Final EA Methodology

Subchapter 4E presented the methodologies used for analyses in Section 4E.2.1 (methodology for pedestrian circulation analysis), Section 4E.3.1 (for bicycle assessment), and Section 4E.4.1 (for vehicular, pedestrian, and bicycle safety). As described there, those methodologies included the following steps.

Pedestrians

1. Selected for analysis the tolling scenario that would result in the largest number of new transit riders and therefore the largest increase in pedestrian volumes on sidewalks, street corners, and crosswalks outside transit hubs. Tolling Scenario E was used for the analysis of pedestrian conditions.
2. Used BPM output to identify transit stations and hubs where the CBD Tolling Alternative (Tolling Scenario E, the scenario with the largest increase in pedestrian volumes) would result in more than 200 new pedestrians in the peak hour.
3. For stations and hubs from Step 2, identified those with external pedestrian elements (sidewalks, crosswalks, or corners) where the CBD Tolling Alternative (any tolling scenario) would result in more than 200 new pedestrians per hour.
4. For stations from Step 3, conducted a detailed (quantified) analysis of capacity vs. demand to identify potential effects on pedestrian flow.
5. For any adverse effects identified in Step 4, mitigation was developed.

Bicycles

1. Based on mode share data from the New York Metropolitan Transportation Council, the analysis assumed that 2 percent of pedestrian trips at transit hubs in Manhattan may be bicycle trips.
2. With that assumption, bicycle demand vs. capacity at transit hubs was qualitatively assessed.

Safety

1. For the stations and hubs where detailed pedestrian analyses were conducted, NYCDOT accident data were reviewed to identify potential for safety issues related to changes in pedestrian volumes with the CBD Tolling Alternative.
2. For the stations where detailed pedestrian analyses were conducted, analysis locations were assessed for compliance with the Americans with Disabilities Act (ADA).

Reevaluation Methodology

Pedestrians

1. Same as in the Final EA; used BPM output to identify transit stations and hubs where the adopted toll structure would result in more than 200 new pedestrians in the peak hour.
2. Same as in the Final EA; for stations and hubs from Step 1, identified those with external pedestrian elements (sidewalks, crosswalks, or corners) where the adopted toll structure would result in more than 200 new pedestrians per hour. For those locations, identified locations where the number of incremental trips with the adopted toll structure is greater than the incremental trips associated with Tolling Scenario E.
3. If a location met the Step 2 threshold for increased pedestrians, but the increase was less than that in Tolling Scenario E, where no adverse effects were found after detailed analysis in the Final EA, then no further detailed analysis was necessary. For other locations that met the Step 2 threshold, conducted a detailed (quantified) analysis of capacity vs. demand to identify potential effects on pedestrian flow.
4. For any adverse effects identified in Step 3, reviewed adequacy of Final EA mitigation (this was not needed for any locations).

Bicycles and Safety

The Project Sponsors used the same methodologies used in the Final EA for the reevaluation.

ANALYSIS AND RESULTS

Pedestrians

Both the Final EA Tolling Scenario E and the adopted toll structure would increase the total number of peak-hour transit trips throughout the region, but the increase would be lower with the adopted toll structure (1.4 percent overall) than with Final EA Tolling Scenario E (1.8 percent increase overall), as shown in Table 4E.1.

Table 4E.1 - Modified Final EA Table 4A-10. Daily Manhattan CBD-Related Transit Journeys (compared to No Action Alternative) by Tolling Scenario (2023) – With the Adopted Toll Structure Added

	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
NO ACTION	A	B	C	D	E	F	G	
1,833,770	1,856,016	1,856,487	1,864,633	1,874,509	1,878,700	1,872,355	1,860,737	1,864,947
Difference	22,246	22,717	30,863	40,739	44,930	38,585	26,967	31,177
Percentage	1.2%	1.2%	1.7%	2.2%	2.5%	2.1%	1.5%	1.7%

The Final EA concluded that at most transit stations throughout the region, the volume of pedestrian trips would be distributed among different station entrances and different locations around the station, and no adverse effects would occur to pedestrian conditions. The analysis identified 16 stations and station hubs

where Tolling Scenario E would result in more than 200 new pedestrian trips in the peak hour, and of those, two station hubs where there would be more than 200 new pedestrian trips at individual pedestrian elements outside the stations. For those two station hubs, a quantified analysis was performed:

- World Trade Center/Fulton Street (in the Manhattan CBD)
- Herald Square/Penn Station (in the Manhattan CBD)

- The quantified analysis in the Final EA (Tolling Scenario E) found that there would be no adverse effects at the World Trade Center/Fulton Street transit hub (1,222 new peak-hour pedestrians for Tolling Scenario E and 937 new peak-hour pedestrians for the adopted toll structure). The Final EA concluded that a potential adverse effect would occur at three pedestrian elements at the Herald Square/Penn Station transit hub—a sidewalk location and two crosswalks (2,051 new peak-hour pedestrians for Tolling Scenario E and 1,063 new peak-hour pedestrians for the adopted toll structure). The Final EA determined that these effects would be mitigated, if appropriate, through standard measures to widen the pedestrian space on sidewalks (by removing obstructions) and crosswalks (by widening the striped area). The Final EA described a monitoring plan with thresholds that would trigger NYCDOT implementing these actions to increase pedestrian space.
- Based on updated BPM results for the adopted toll structure, the adopted toll structure would result in 200 new peak-hour pedestrian trips at 11 stations/station hubs (compared to 16 with Tolling Scenario E) and of those, it would result in more than 200 new peak-hour pedestrian trips at individual elements outside the station at one station hub, the Herald Square/Penn Station hub. **Table 4E.2** shows the results of the screening analysis for the Final EA (Tolling Scenario E) and the adopted toll structure.

Table 4E.2 – Modified Final EA Table 4E-1. Transit Station Pedestrian Trip Assessment (2023) – With Adopted Toll Structure Added

TRANSIT STATIONS WITH MORE THAN 200 NEW PEDESTRIANS PER HOUR		TOTAL NEW PEDESTRIANS PER PEAK HOUR (ALL PEDESTRIAN ELEMENTS)		INDIVIDUAL PEDESTRIAN ELEMENT WITH MORE THAN 200 NEW PEDESTRIANS PER PEAK HOUR	
FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE	FINAL EA SCENARIO E AM / PM	ADOPTED TOLL STRUCTURE AM / PM	FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE
14 Street–Union Square, CBD (Nos. 4/5/6, and L/N/R/Q/W subway lines)	14 Street–Union Square, CBD (Nos. 4/5/6, and L/N/R/Q/W subway lines)	403 / 434	297 / 319	No	No
Herald Square/Penn Station New York, CBD, includes the following: ▪ 34 Street–Herald Square subway station (B/D/F/M/N/Q/R/W subway lines) ▪ 34 Street–Penn Station subway station (Nos. 1/2/3 subway lines) ▪ 34 Street–Penn Station subway station (A/C/E subway lines) ▪ 33rd Street Station (PATH) ▪ New York Pennsylvania Station (Amtrak, LIRR, NJ TRANSIT)	Herald Square/Penn Station New York, CBD, includes the following: ▪ 34 Street–Herald Square subway station (B/D/F/M/N/Q/R/W subway lines) ▪ 34 Street–Penn Station subway station (Nos. 1/2/3 subway lines) ▪ 34 Street–Penn Station subway station (A/C/E subway lines) ▪ 33rd Street Station (PATH) ▪ New York Pennsylvania Station (Amtrak, LIRR, NJ TRANSIT)	2,003 / 2,051	1,036 / 1,063	**Yes**	**Yes**
42 Street–Bryant Park, CBD (B/D/F/M subway lines and connection to Fifth Avenue [No. 7 subway line])	—	204 / 219	165 / 177	No	—
47-50 Streets–Rockefeller Center, Manhattan CBD (B/D/F/M subway lines)	47-50 Streets–Rockefeller Center, CBD (B/D/F/M subway lines)	273 / 294	246 / 265	No	No
Broadway–Lafayette Street, Manhattan CBD (B/D/F/M and No. 6 subway lines)	Broadway–Lafayette Street, CBD (B/D/F/M and No. 6 subway lines)	288 / 311	193 / 208	No	No
Canal Street, CBD (J/N/Q/R/W/Z and No. 6 subway lines)	—	190 / 205	142 / 152	No	—
Canal Street, CBD (A/C/E subway lines)	—	228 / 246	145 / 156	No	—
World Trade Center/Fulton Street, CBD, includes the following: ▪ Fulton Street subway stations (Nos. 2/3/4/5 and A/C/J/Z subway lines) ▪ World Trade Center Station (PATH) ▪ Cortlandt Street Station (R/W subway lines)	World Trade Center/Fulton Street, CBD, includes the following: ▪ Fulton Street subway stations (Nos. 2/3/4/5 and A/C/J/Z subway lines) ▪ World Trade Center Station (PATH) ▪ Cortlandt Street Station (R/W subway lines)	1,134 / 1,222	872 / 937	**Yes**	No
Flushing Main Street, Queens, NY (No. 7 subway line)	Flushing Main Street, Queens, NY (No. 7 subway line)	263 / 283	288 / 310	No	No

TRANSIT STATIONS WITH MORE THAN 200 NEW PEDESTRIANS PER HOUR		TOTAL NEW PEDESTRIANS PER PEAK HOUR (ALL PEDESTRIAN ELEMENTS)		INDIVIDUAL PEDESTRIAN ELEMENT WITH MORE THAN 200 NEW PEDESTRIANS PER PEAK HOUR	
FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE	FINAL EA SCENARIO E AM / PM	ADOPTED TOLL STRUCTURE AM / PM	FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE
Atlantic Terminal, Brooklyn, NY, includes the following: ▪ Atlantic Avenue–Barclays Center subway station (Nos. 2/3/4/5 and B/D/N/Q/R/W subway lines) ▪ Atlantic Terminal (LIRR)	—	230 / 236	145 / 144	No	—
Grand Central Terminal, CBD, includes the following: ▪ 42 Street–Grand Central subway station (Nos. 4/5/6/7/S subway lines) ▪ Grand Central Terminal (Metro-North Railroad)	Grand Central Terminal, CBD, includes the following: ▪ 42 Street–Grand Central subway station (Nos. 4/5/6/7 and S subway lines) ▪ Grand Central Terminal (Metro-North Railroad)	1,163 / 1,205	963 / 989	No	No
Lexington Avenue/53 Street, Manhattan CBD (E/M subway lines and connection to 51 Street [No. 6 subway line])	Lexington Avenue/53 Street, CBD (E/M subway lines and connection to 51 Street [No. 6 subway line])	348 / 374	252 / 270	No	No
Second Avenue, CBD (F subway line)	—	195 / 210	143 / 154	No	—
Wall Street, CBD (Nos. 2/3 subway lines)	—	189 / 204	149 / 160	No	—
Secaucus, Hudson County, NJ (NJ TRANSIT)	Secaucus, Hudson County, NJ (NJ TRANSIT)	547 / 547	375 / 375	No	No
Hoboken Terminal, Hudson County, NJ (PATH/NJ TRANSIT)	Hoboken Terminal, Hudson County, NJ (PATH/NJ TRANSIT)	802 / 826	263 / 274	No	No
—	Jackson Heights-Roosevelt Avenue, Queens, NY (E/F/M/R/No. 7 subway lines)	151 / 163	203 / 218	—	No

Source: WSP, Best Practice Model.

Note: — station would not result in 200 or more new pedestrians in the peak hour.

With the adopted toll structure, at the transit hub where incremental peak-hour pedestrian volumes would exceed the screening threshold of 200 trips per hour, three pedestrian elements would exceed the 200-trip-per-hour threshold and therefore warranted additional analysis (see **Table 4E.3**). These were elements that also exceeded the screening threshold with Final EA Tolling Scenario E, but they were not the elements where the Final EA identified adverse effects. At these locations, where the adopted toll structure would result in more than 200 new pedestrians in the peak hour, incremental pedestrian volumes resulting from the adopted toll structure would be approximately 50 percent smaller than the incremental pedestrian volumes from Tolling Scenario E. Since the Final EA did not find adverse effects at these locations from Tolling Scenario E, adverse effects also would not occur from the adopted toll structure.

The Final EA (Tolling Scenario E) identified adverse effects at the west sidewalk of Eighth Avenue between 34th Street and 35th Street, the north crosswalk of Seventh Avenue and 32nd Street, and the north crosswalk of Sixth Avenue and 34th Street. The adopted toll structure would not result in more than 200 new pedestrians in the peak hour at any of those locations and therefore the adverse effects would no longer occur with the adopted toll structure. While mitigation at Herald Square is no longer needed with the adopted toll structure, the Project Sponsors will implement the mitigation described in the Final EA and FONSI as an enhancement.

Table 4E.3 – Modified Final EA Table 4E.2-14 (from Appendix 4E). Pedestrian Level 2 Screening Analysis Results – Herald Square/Penn Station Study Area (2023) – With Adopted Toll Structure and Addition of Impact Results

PEDESTRIAN ELEMENTS	FINAL EA (SCENARIO E)					ADOPTED TOLL STRUCTURE				
	INCREMENTAL PEDESTRIAN TRIPS			ANALYSIS LOCATION	ADVERSE EFFECT	INCREMENTAL PEDESTRIAN TRIPS			ANALYSIS LOCATION	ADVERSE EFFECT
	AM	Midday	PM			AM	Midday	PM		
Eighth Ave and 34th St										
North sidewalk along 34th St between Seventh Ave and Eighth Ave	319	64	193	✓	No	163	32	102		No
South sidewalk along 34th St between Seventh Ave and Eighth Ave	62	30	173		No	*	*	*		No
West sidewalk along Eighth Ave between 34th St and 35th St	**221**	53	**204**	✓	**Yes: AM, PM**	114	27	104		No
Northeast corner	319	65	193	✓	No	163	33	102		No
Southeast corner	62	30	173		No	*	*	*		
Southwest corner	64	44	284	✓	No	37	22	141		No
Northwest corner	261	63	242	✓	No	135	32	125		No
North crosswalk	259	49	131	✓	No	132	25	70		No
South crosswalk	62	30	173		No	*	*	*		No
Eighth Ave and 31st St										
West sidewalk along Eighth Ave between 31st St and 32nd St	192	46	179		No	*	*	*		No
Southwest corner	172	42	159		No	*	*	*		No
Northwest corner	200	48	188		No	103	25	98		No
West crosswalk	160	38	146		No	*	*	*		No
Seventh Ave and 34th St										
East sidewalk along Seventh Ave between 34th St and 35th St	59	21	105		No	*	*	*		No
North sidewalk along 34th St between Seventh Ave and Broadway	500	128	532	✓	No	258	67	275	✓	No
Northeast corner	131	35	143		No	*	*	*		No
Northwest corner	104	22	71		No	*	*	*		No
Seventh Ave and 32nd St										
North sidewalk along 32nd St between Sixth Ave and Seventh Ave	399	82	262	✓	No	201	42	137	✓	No
West sidewalk along Seventh Ave between 31st St and 32nd St	34	22	144		No	*	*	*		No
Northeast corner	252	40	70	✓	No	127	20	38		No
North crosswalk	**221**	36	69	✓	**Yes: AM**	111	18	37		No

PEDESTRIAN ELEMENTS	FINAL EA (SCENARIO E)					ADOPTED TOLL STRUCTURE				
	INCREMENTAL PEDESTRIAN TRIPS			ANALYSIS LOCATION	ADVERSE EFFECT	INCREMENTAL PEDESTRIAN TRIPS			ANALYSIS LOCATION	ADVERSE EFFECT
	AM	Midday	PM			AM	Midday	PM		
Broadway and 34th St										
North sidewalk along 34th St between Seventh Ave and Broadway	460	121	518	✓	No	238	64	269	✓	No
Sixth Avenue and 34th St										
East sidewalk along Sixth Ave between 34th St and 35th St	131	31	118		No	*	*	*		No
North sidewalk along 34th St between Fifth Ave and Sixth Ave	241	57	220	✓	No	125	29	113		No
South sidewalk along 34th St between Fifth Ave and Sixth Ave	100	18	43		No	*	*	*		No
Northeast corner	313	72	268	✓	No	162	37	137		No
North crosswalk	**265**	65	**259**	✓	**Yes: AM, PM**	136	33	132		No

Notes: ✓ denotes pedestrian elements selected for detailed analysis (AM/PM only).
* Pedestrian elements with fewer than 100 project-generated pedestrian trips in a peak hour are not presented in this table.

Table 4E.4 – Comparison of Pedestrian Effects, Final EA and Adopted Toll Structure

ANALYSIS STEP	FINAL EA (SCENARIO E)	ADOPTED TOLL STRUCTURE
1. Transit stations / hubs with more than 200 new pedestrians in the peak hour	**16 stations/hubs**	**11 stations/hubs**
2. Transit stations / hubs with individual pedestrian elements that have more than 200 new pedestrians in the peak hour	**2 stations/hubs** Herald Square/Penn Station 14 elements would exceed: 6 sidewalks 5 corner reservoirs 3 crosswalks World Trade Center/Fulton St 2 elements would exceed: 1 sidewalk 1 corner reservoir	**1 station/hub** Herald Square/Penn Station 3 elements would exceed: 3 sidewalks
3. For intersections identified in Step 2, detailed level-of-service analysis to identify adverse effects (if needed after comparison to Tolling Scenario E)	**Adverse effects at 1 station/hub** Herald Square/Penn Station Of the 14 elements analyzed, 3 potential adverse effects: 1 sidewalk 2 crosswalks	**No adverse effects** The 3 elements that had potential adverse effects under Tolling Scenario E were not flagged in Step 2 for the adopted toll structure. For the adopted toll structure, the increase in pedestrians at each element that were flagged in Step 2 was less than the increment for Tolling Scenario E, and no adverse effects were found for Tolling Scenario E at those locations.
4. For adverse effects, identification of mitigation measures	**Mitigation needed** – monitoring plan resolved adverse effects at Herald Square/Penn Station	No mitigation needed

Bicycles

The Final EA concluded that the CBD Tolling Alternative would result in small increases in bicycle trips near transit hubs where the highest increases in pedestrian trip share would occur, and some shifts from automobiles to bicycles. No adverse effects on bicycle conditions would occur. With the adopted toll structure, pedestrian volumes, and hence estimated bicycle volumes, would be lower than predicted in the Final EA, and the conclusions of the Final EA remain valid.

Safety

The Final EA found that the CBD Tolling Alternative would result in reduced vehicle volumes in the Manhattan CBD, which would result in an overall benefit to safety. No substantial increases in pedestrian volumes or safety concerns at transit stations would occur. None of the curb ramps at locations analyzed in detail in the Final EA met ADA compliance when the analysis was prepared, but NYCDOT has an ongoing Pedestrian Ramp Program dedicated to upgrading and installing pedestrian ramps throughout New York City. With the adopted toll structure, pedestrian volumes would be lower than predicted in the Final EA and the conclusions of the Final EA remain valid.

Table 4E.5 presents information from the Final EA Table ES-5 summarizing the conclusions related to pedestrians and bicycles, now modified to include the adopted toll structure.

FINDINGS

The analysis conducted for the reevaluation considered the effects of the adopted toll structure on pedestrian and bicycle conditions using the same methodology as used for the Final EA. The analysis concluded that both the Project as evaluated in the Final EA (Tolling Scenario E) and the adopted toll structure would increase the number of peak-hour transit trips throughout the region, which would also result in an increase in pedestrian trips near transit stations, but the increase would be lower with the adopted toll structure (1.4 percent overall) than with Final EA Tolling Scenario E (which had an increase of 2.5 percent). While the Final EA predicted an adverse effect on pedestrian conditions at one sidewalk and two crosswalks near the Herald Square/Penn Station transit hub within the Manhattan CBD, this adverse effect would no longer occur with the adopted toll structure, and mitigation would no longer be required. Incremental pedestrian volumes around the Herald Square/Penn Station transit hub would be approximately 50 percent lower with the adopted toll structure than predicted in the Final EA. In addition, the adopted toll structure would not result in adverse effects on pedestrian conditions at other locations. Therefore, the conclusions of the Final EA remain valid. Although the mitigation measures described in the Final EA and FONSI would no longer be needed at Herald Square/Penn Station, the Project Sponsors would implement the commitments related to pedestrian conditions described in the Final EA and FONSI as an enhancement.

Table 4E.5 – Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
4E – Transportation: Pedestrians and Bicycles	Pedestrian Circulation	Increased pedestrian activity on sidewalks outside transit hubs because of increased transit use. At all but one location in the Manhattan CBD (Herald Square/Penn Station), the increase in transit riders would not generate enough new pedestrians to adversely affect pedestrian circulation in the station area. Outside the Manhattan CBD, transit usage at individual stations would not increase enough to adversely affect pedestrian conditions on nearby sidewalks, crosswalks, or corners.	Herald Square/Penn Station NY	Sidewalks, corners, and crosswalks with pedestrian volumes above threshold in AM / PM peak periods	Adverse effects on pedestrian circulation at one sidewalk segment and two crosswalks							Yes	**Mitigation needed.** The Project Sponsors will implement a monitoring plan at this location. The plan will include a baseline, specific timing, and a threshold for additional action. If that threshold is reached, NYCDOT will increase pedestrian space on sidewalks and crosswalks via physical widening and/or removing or relocating obstructions.	Pedestrian volumes at key transit stations/hubs would be similar to those predicted in Final EA. Adverse effects are no longer predicted at Herald Square.	No	**Mitigation is no longer needed.** The Project Sponsors will implement the mitigation commitment described in the Fina EA, including monitoring and improvements, if warranted, as an enhancement
	Bicycles	Small increases in bicycle trips near transit hubs and as a travel mode	Manhattan CBD	Narrative	Small increases in bicycle trips near transit hubs with highest increases in pedestrian trip share							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
			Outside Manhattan CBD	Narrative	Some shifts from automobile to bicycles							No	**No mitigation needed**. No adverse effects		No	**No mitigation needed**. No adverse effects
	Safety	No adverse effects	Overall	Narrative	No substantial increases in pedestrian volumes or increased safety concerns, including at existing identified high-crash locations. Overall, with fewer vehicular trips entering and exiting the Manhattan CBD, the CBD Tolling Alternative could result in reduced traffic volumes at these locations. This would help to reduce vehicle-vehicle and vehicle-pedestrian conflicts, leading to an overall benefit to safety.							No	**No mitigation needed.** No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

5 Social Conditions: Population Characteristics and Community Cohesion (EA Subchapter 5A), Neighborhood Character (EA Subchapter 5B), and Public Policy (EA Subchapter 5C)

Chapter 5 of the Final EA encompassed three subchapters (Subchapters 5A, 5B, and 5C) that together presented an assessment of the potential effects of implementing the CBD Tolling Alternative on social conditions, which included population characteristics and community cohesion (incorporating consideration of community facilities and services, access to employment, and effects on vulnerable social groups), neighborhood character, and public policy. This section reevaluates the effects of the adopted toll structure on those conditions.

METHODOLOGY

Final EA Methodology

The Final EA considered the range of issues that together constitute social conditions, consistent with FHWA guidance documents. Information on population characteristics was largely based on the U.S. Census Bureau's 2015–2019 American Community Survey (ACS) 5-Year Estimates. BPM results were used to evaluate the Project's effects on those characteristics. The methodologies used are described in further detail in in the Final EA in Subchapter 5A, "Population Characteristics and Community Cohesion," Section 5A.2, "Methodology" starting on page 5A-1 and Subchapter 5B, "Neighborhood Character," Section 5B.2.1, "Methodology" starting on page 5B-1.

Reevaluation Methodology

The same methodology was used for reevaluation of the adopted toll structure. BPM output for the adopted toll structure was compared to the results evaluated in the Final EA to determine potential changes in conclusions related to social conditions.

ANALYSIS AND RESULTS

The Final EA concluded that the congestion reductions resulting from the CBD Tolling Alternative would positively affect community connections and access to employment, education, healthcare, and recreation for residents. Based on an analysis of BPM results and other contextual information about the study area, the Final EA also concluded the following:

- The predicted changes in travel patterns would not adversely affect community cohesion. Changes to travel patterns, including increased use of transit, as a result of the Project would not adversely affect

community cohesion or make it more difficult for people to connect with others in their community, given the extensive transit network connecting to the Manhattan CBD and the small change in trips predicted.

- The Project would not result in the potential for indirect (involuntary) residential displacement. The Project would not result in the potential for indirect (involuntary) residential displacement. It would not result in substantial changes to market conditions so as to lead to changes in housing prices, given that real estate values in the Manhattan CBD are already high and the many factors that affect each household's decisions about where to live. In addition, low-income residents of the CBD would not experience a notable increase in the cost of living as a result of the Project because of the lack of change in housing costs, the many housing units protected through New York's rent-control, rent-stabilization, and other similar programs, the tax credit available to CBD residents with incomes of up to $60,000, and the conclusion that the cost of goods would not increase as a result of the Project.
- While the Project would increase costs for community service providers that operate vehicles into and out of the Manhattan CBD and for people who travel by vehicle to community facilities and services in the Manhattan CBD or from the CBD, given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on community facilities and services.
- The Project would not adversely affect vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations. The specific costs incurred by each individual would vary depending on their particular circumstances. Many people, and particularly transit-dependent and non-driver populations, would benefit from travel-time and reliability improvements to bus service due to traffic reductions as well as from improvements to transit services.
- Access to employment in the Manhattan CBD would not be adversely affected. Most commuters to the CBD currently use transit. Those who drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD. There would be a negligible effect (less than 0.1 percent) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today (11 percent of all commuters, or approximately 142,500 of the nearly 1.3 million people who commute to the Manhattan CBD from locations outside the CBD).
- The changes in traffic patterns on local streets would not change the defining elements of the neighborhood character of the Manhattan CBD, which includes a variety of different land use types and neighborhoods. As described in the Final EA in Chapter 5, "Social Conditions," Section 5A.4.2.1 (see page 5A-17) and Section 5B.4.2 (see page 5B-11), the predicted decrease in traffic volumes would result in beneficial effects to social conditions and neighborhood character within the CBD.
- The Project would be consistent with regional transportation plans and other public policies.

With the adopted toll structure, automobile toll rates are within the range evaluated in the Final EA. The Final EA described the potential changes in travel patterns that might occur with the new toll, with changes in the number of daily journeys (where a journey is a round-trip) to the Manhattan CBD by all modes for Tolling Scenarios A through F ranging from a decrease of 1,886 to an increase of 3,147 daily journeys, or

changes of -0.07 percent to +0.11 percent from the No Action Alternative. With the adopted toll structure, there would be an increase of 846 daily journeys to the CBD, an increase of 0.03 percent from the No Action Alternative, which is within the range evaluated in the Final EA (see Table 5.1). The effects on travel patterns (e.g., the change in total daily journeys to the Manhattan CBD) for non-work-related journeys such as travel for school, shopping, medical care, or entertainment purposes) would also be within the range evaluated in the Final EA. The adopted toll structure would result in an increase in these journeys of 0.1 percent and the change for the tolling scenarios evaluated in the Final EA/FONSI ranged from a decrease of 0.4 percent to an increase of 0.2 percent (see Table 5.2). The adopted toll structure includes a low-income discount plan that provides a greater discount than the commitments of the Final EA and FONSI (50 percent toll reduction after 10 trips versus the Final EA's commitment to 25 percent toll reduction after 10 trips). In addition, while the Final EA described that qualifying vehicles transporting people with disabilities would be exempt from the toll, the adopted toll structure includes two specific plans that would enable individuals with disabilities and organizations that transport such individuals to apply for an exemption from the CBD toll: an Individual Disability Exemption Plan and an Organization Disability Exemption Plan. Therefore, the conclusions of the Final EA remain valid.

*Table 5.1 – Change in Total Daily Journeys (All Modes) To, Within, and From the Manhattan CBD – Final EA and Adopted Toll Structure**

PARAMETER	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Auto toll rates – peak	$9	$10	$14	$19	$23	$23	$12	$15
Auto toll rates – off-peak	$7	$8	$11	$14	$17	$17	$9	$3.75
Auto toll rates – overnight	$5	$5	$7	$10	$12	$12	$7	
Low-income discount plan	25% discount**							50% discount**
Change in total daily journeys **to, within, and from** the Manhattan CBD	+305 (+0.01%)	+2.993 (+0.10%)	+3,147 (+0.11%)	-1,886 (-0.07%)	-660 (-0.02%)	+1,424 (+0.05%)	+1,141 (+0.04%)	+846 (+0.03%)

* See Final EA Table 5A-3, pg. 5A-23.

** The Final EA committed to a Low-Income Discount Plan with a 25% discount on the peak toll rate after the first 10 trips each month (resulting in a discounted base auto toll rate of $7 - $17). The adopted toll structure has a 50% discount on the peak toll rate after the first 10 trips each month (resulting in a discounted base auto toll rate of $7.50).

*Table 5.2 – Predicted Changes in Non-Work Journeys in Final EA and Adopted Toll Structure (2023)**

PARAMETER	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Change in non-work-related journeys **to, within, and from** the Manhattan CBD vs. No Action Alternative	-803 (-0.2%)	+2,124 (+0.2%)	+364 (+0.04%)	-3,726 (-0.4%)	-2,660 (-0.3%)	+570 (+0.1%)	-368 (-0.04%)	+836 (+0.1%)

* See Final EA Table 5A-5, pg. 5A-25.

Table 5.3 presents information from the Final EA Table ES-5 summarizing the conclusions related to social conditions, now modified to include the adopted toll structure.

FINDINGS

To consider the effect of the adopted toll structure on social conditions, the Project Sponsors reviewed the parameters of the toll structure and BPM results for the adopted toll structure in comparison to results evaluated in the Final EA with respect to factors that affect social conditions, such as travel patterns, work-related and non-work-related trips, and changes in traffic patterns that could affect localized neighborhood character. As presented earlier, the toll rates and other parameters fall within the range evaluated in the Final EA. In addition, BPM results for the adopted toll structure for factors affecting social conditions also fall within the range evaluated in the Final EA. Consequently, the conclusions of the Final EA remain valid. No new adverse effects would occur and no new mitigation would be required.

Table 5.3 – Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
5A – Social Conditions: Population	Benefits	Benefits in and near the Manhattan CBD	28-county study area	Narrative	Benefits in and near the Manhattan CBD related to travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, reduced air pollutant emissions, and predictable funding source for transit improvements. This would positively affect community connections and access to employment, education, healthcare, and recreation for residents.							No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects
	Community Cohesion	Changes to travel patterns, including increased use of transit, resulting from new toll	28-county study area	Narrative	Changes to travel patterns, including increased use of transit, as a result of the Project would not adversely affect community cohesion or make it more difficult for people to connect with others in their community, given the extensive transit network connecting to the Manhattan CBD and the small change in trips predicted.							No	**No mitigation needed.** No adverse effects (see "Environmental Justice" for mitigation related to increased costs for low-income drivers).	Same as Final EA	No	**No mitigation needed.** Beneficial effects
	Indirect Displacement	No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents	Manhattan CBD	Narrative	The Project would not result in the potential for indirect (involuntary) residential displacement. It would not result in substantial changes to market conditions so as to lead to changes in housing prices, given that real estate values in the Manhattan CBD are already high and the many factors that affect each household's decisions about where to live. In addition, low-income residents of the CBD would not experience a notable increase in the cost of living as a result of the Project because of the lack of change in housing costs, the many housing units protected through New York's rent-control, rent-stabilization, and other similar programs, the tax credit available to CBD residents with incomes of up to $60,000, and the conclusion that the cost of goods would not increase as a result of the Project (see "Economic Conditions").							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Community Facilities and Services	Increased cost for community facilities and service providers in the Manhattan CBD, their employees who drive, and clientele who drive from outside the CBD	Manhattan CBD	Narrative	The Project would increase costs for community service providers that operate vehicles into and out of the Manhattan CBD and for people who travel by vehicle to community facilities and services in the Manhattan CBD, as well as residents of the CBD and employees of community facilities who use vehicles to travel to community facilities outside the CBD. Given the wide range of travel options other than driving, the cost for users to drive to community facilities and services would not constitute an adverse effect on community facilities and services.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Effects on Vulnerable Social Groups	Benefits to vulnerable social groups from new funding for MTA Capital Program	28-county study area	Narrative	The Project would benefit certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations by creating a funding source for the MTA 2020–2024 Capital Program (and subsequent capital programs and by reducing congestion in the Manhattan CBD). Elderly individuals would benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative, as bus passengers tend to be older than riders on other forms of transit, such as the subway and, as described above, bus passengers in the Manhattan CBD would benefit from travel-time savings due to the decrease in congestion. People over the age of 65 with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA's paratransit service, including taxis and FHVs operating on behalf of MTA to transport paratransit users. Elderly people with disabilities and low-income individuals who drive to the Manhattan CBD would be entitled to the same mitigation and enhancements proposed for low-income and disabled populations, in general. Other elderly individuals who drive to the Manhattan CBD would pay the toll.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
	Access to Employment	Increased cost for small number of people who drive to work	28-county study area	Narrative	Decrease in work trips by driving modes to and within the Manhattan CBD, with an offsetting increase in transit ridership. Those who drive despite the CBD toll would do so based on the need or convenience of driving and would benefit from the reduced congestion in the Manhattan CBD. Negligible effect (less than 0.1%) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today.							No	**No mitigation needed.** No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

Table 5.3 – Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
5B – Social Conditions: Neighborhood Character	Neighborhood character	No notable change in neighborhood character	Manhattan CBD	Narrative	The changes in traffic patterns on local streets would not change the defining elements of the neighborhood character of the Manhattan CBD.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
			Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street CBD boundary (including increases just north of 60th Street and decreases just to the south) would not create a climate of disinvestment that could lead to adverse effects on neighborhood character nor alter the defining elements of the neighborhood character of this area.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects
5C – Social Conditions: Public Policy	Public policy	No effect	28-county study area	Narrative	The Project would be consistent with regional transportation plans and other public policies in place for the regional study area and the Manhattan CBD.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed**. No adverse effects

6 Economic Conditions

Chapter 6 of the Final EA presented an assessment of the potential effects of implementing the CBD Tolling Alternative on economic conditions at both the regional and neighborhood level. This section reevaluates the effects of the adopted toll structure on those conditions.

METHODOLOGY

Final EA Methodology

Chapter 6 of the Final EA detailed the methodology used for the assessment on economic conditions in Section 6.2, beginning on page 6-1. As presented there, that included the following:

1. Identified baseline conditions using data from the U.S. Census, U.S. Department of Labor, and other sources with information on economic activities in the CBD and the 28-county regional study area
2. Used BPM output related to the Final EA tolling scenarios to identify potential changes for all tolling scenarios related to:
    - Movement of workforce
    - Non-work-related trips, including tourism
    - Taxi and FHV industry
    - Movement of goods and services and related effects on small businesses
    - Neighborhood-level effects near the 60th Street CBD boundary

Reevaluation Methodology

1. Compared BPM output for the adopted toll structure to the results evaluated in the Final EA to determine potential changes in conclusions related to economic conditions, for the same topics evaluated in the Final EA

ANALYSIS AND RESULTS

Movement of Workforce

The Final EA concluded that no adverse economic effects would occur to any particular industry or occupational category as a result of the Project. The Manhattan CBD is highly accessible by transit and the majority of people who work in the CBD use transit to travel to work. While certain industries and occupations in the CBD have higher rates of auto commuting, these businesses have a small number of employees overall.

With the adopted toll structure ($15 with E-ZPass) and a corresponding reduction of 17,290 worker journeys (round-trips) to, from, and within the CBD, automobile toll rates are within the range evaluated in the Final EA ($9 to $23 with E-ZPass) as is the predicted reduction in total worker journeys, which ranged from 11,790 to 27,221 for the tolling scenarios evaluated in the Final EA. The effects on the workforce would therefore be consistent with the conclusions of the Final EA (see Table 6.1 below). The conclusions of the Final EA remain valid.

*Table 6.1 - Change in Daily Worker Journeys To, Within, and From the Manhattan CBD – Final EA and Adopted Toll Structure**

PARAMETER	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Auto toll rates – peak	$9	$10	$14	$19	$23	$23	$12	$15
Auto toll rates – off-peak	$7	$8	$11	$14	$17	$17	$9	$3.75
Auto toll rates – overnight	$5	$5	$7	$10	$12	$12	$7	$3.75
Change in total daily worker journeys by auto **to and within** the Manhattan CBD vs. No Action Alternative	-12,552 (-4.6%)	-11,790 (-4.4%)	-17,271 (-6.4%)	-23,877 (-8.8%)	-27,221 (-10.1%)	-24,230 (-9.0%)	-13,264 (-4.9%)	-17,290 (-6.4%)
Change in total daily worker journeys by auto **from** the Manhattan CBD vs. No Action Alternative	-482 (-3.8%)	-328 (-2.6%)	-661 (-5.3%)	-961 (-7.7%)	-916 (-7.3%)	-621 (-5.0%)	-550 (-4.4%)	-420 (-3.4%)

* See Final EA Table 6-23, pg. 6-51.

Non-Work-Related Trips, Including Tourism

The tourism industry in the CBD is not dependent on travel by autos or taxis/FHVs; most visitors (96 percent) use transit, walking, or tour buses to reach the CBD. The Final EA evaluated the CBD Tolling Alternative's potential effects on non-work-related journeys to and within the Manhattan CBD, including trips made for shopping and tourism. All tolling scenarios would result in small changes in non-work-related journeys to and within CBD from the No Action Alternative.

The Final EA concluded that the tolling scenarios would not adversely affect tourism or other industries related to non-work-related trips. The Final EA showed the predicted change in the number of non-work journeys to and within the CBD, which ranged from a reduction of 3,726 to an increase of 2,124. As shown in Table 6.2, the adopted toll structure would result in an increase of 836 non-work-related journeys (across all modes) to and within CBD, which falls within the range evaluated in the Final EA, and the conclusions of the Final EA remain valid.

*Table 6.2 - Predicted Changes in Non-Work Journeys (2023), Final EA and Adopted Toll Structure**

PARAMETER	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Change in Non-Work-Related Journeys To and Within CBD vs. No Action Alternative	-803 (-0.2%)	+2,124 (+0.2%)	+364 (+0.04%)	-3,726 (-0.4%)	-2,660 (-0.3%)	+570 (+0.1%)	-368 (-0.04%)	+836 (+0.1%)

* See Final EA Table 6-28, pg. 6-58.

Taxi and FHV Industry

The Final EA assessed the effects of the CBD Tolling Alternative on the taxi and FHV industry. The tolling scenarios evaluated in the Final EA included a variety of tolling policies for taxis and FHVs, ranging from unlimited tolling for taxis each day to a complete exemption from paying the CBD toll. In all tolling scenarios, the base toll price for taxis and FHVs, if any, was the same as for automobiles.

The analysis in the Final EA showed that in all tolling scenarios, the VMT for taxis and FHVs with paying customers (i.e., excluding VMT without paying customers in the vehicle) would decrease regionwide, in New York City, and in Manhattan overall. The reductions would be greatest in New York City, ranging from 5 to 9 percent in tolling scenarios that do not include a cap or exemption for tolls on taxis and FHVs (Tolling Scenarios A, D, and G) and 1 to 5 percent in those that do have caps and/or exemptions (Tolling Scenarios B, C, E, and F). For tolling scenarios with no cap or exemption for tolls on taxis and FHVs, VMT reductions would be largest within the Manhattan CBD, which is the core service area for yellow taxis, as well as in Manhattan overall.

The Final EA concluded that tolling scenarios that would toll taxis and/or FHVs more than once a day would result in VMT reductions at a level that could adversely affect income and, potentially, employment for individual drivers (see discussion of environmental justice), but that the industry would remain viable overall. For the Final EA, the Project Sponsors committed to ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final toll structure to avoid an adverse effect on taxi and FHV drivers from the Project.

The Final EA described that in terms of economic impacts on businesses and industries, the change in taxi and FHV operations and business practices without the new commitment, while adverse for taxi and FHV drivers, would not have resulted in an adverse economic impact on the industry overall.

With the adopted toll structure, taxi and FHVs would be tolled for each trip entering, leaving, and within the CBD made with passengers. The base toll for taxis (including yellow taxis, green cabs, and FHVs other than high-volume FHVs) would be $1.25 per trip with paying passengers for trips to, within, or from the Manhattan CBD; for high-volume FHVs, the base toll would be $2.50 per trip with paying passengers for trips to, within, or from the Manhattan CBD.[4] Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily auto peak rate in the adopted toll structure of $15. Based on a New York City Taxi and Limousine Commission (TLC) analysis of trips made by TLC-licensed vehicles in May 2023, the average number of taxi and FHV trips to, within, and from the Manhattan CBD is 12 and 6, respectively. Thus, this rate is consistent with the Project Sponsors' commitment to incorporate a toll of no more than once per day for taxis and FHVs in the adopted toll

[4] The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to high-volume FHVs (i.e., Lyft and Uber).

structure, and falls within the range of daily peak toll rates evaluated in the Final EA and determined not to have an adverse effect on either drivers or the industry, which was from $9 to $23 in the different tolling scenarios (see **Table 6.3**). This rate structure also ensures that the passenger is responsible for covering the cost of the toll and the drivers do not bear the additional cost.

As shown in **Table 6.4**, the resulting change in VMT for taxis and FHVs with paying passengers with the adopted toll structure would also fall within the range evaluated in the Final EA for tolling scenarios that were determined not to have an adverse effect on revenues for taxi and FHV drivers—those that limited tolls for taxis and FHVs to once per day. In the Final EA, Tolling Scenarios B, F, and Modified G limited tolls on taxis and FHVs to once per day, with peak toll rates for autos ranging from $10 to $23. The toll for taxis and FHVs in those scenarios would apply for trips entering the CBD. Those three tolling scenarios resulted in increases in taxi and FHV VMTs within the Manhattan CBD but decreases citywide and regionwide. The other tolling scenarios (A, C, D, E, and G) did not limit tolls for taxis and FHVs to once per day and resulted in decreases in taxi/FHV VMT within the CBD as well as citywide and throughout the region.

The adopted toll structure would have a toll rate between that of Tolling Scenarios Modified G and F but would apply the charge to trips within or leaving the CBD as well as those entering. For this reason, the adopted toll structure is predicted to result in a very small decrease in VMT within the CBD (0.3 percent). Comparing the adopted toll structure to the tolling scenarios evaluated in the Final EA that limited the toll on taxi and FHV to once per day (Tolling Scenarios B, F, and Modified G) and did not result in an adverse effect on taxi and FHV drivers, the adopted toll structure would reduce taxi and FHV VMT in New York City by 1.6 percent, which falls between the 1 to 1.7 percent decrease with those Final EA tolling scenarios. Within the 28-county study area (including the CBD), the adopted toll structure would reduce taxi and FHV VMT by 0.7 percent, which is more than Modified Tolling Scenario G, with a 0.5 percent reduction, and less than Tolling Scenario F, with a 1.0 percent reduction. It would therefore better achieve the congestion reduction purpose of the Project with respect to taxis and FHVs while maintaining a low reduction in VMT within New York City and the region as a whole, comparable to Modified Tolling Scenario G and Tolling Scenario F.

The adopted toll structure, based on the toll rate for taxis and FHVs and the average number of trips per day for those vehicles, is consistent with the Project Sponsors' commitment to toll taxis and FHVs no more than once per day. The smaller per-trip charge ensures that the passenger is responsible for the cost of the toll and the drivers do not bear the burden of the cost. The adopted toll structure would limit the reduction in demand for taxi and FHVs in the Manhattan CBD relative to the No Action, resulting in only a 0.3 percent reduction in taxi and FHV VMT (-904 VMT) within the Manhattan CBD. With the adopted toll structure, the slight reduction in VMT would maintain income for taxi and FHV drivers close to existing levels without increasing VMT within the CBD. Increased VMT would add to the congestion in the CBD, in contrast to the purpose and need of this Project. The conclusions of the Final EA of no adverse effect on the taxi and FHV industry and no disproportionately high and adverse effect on taxi and FHV drivers remain valid.

For additional discussion on the effects of the adopted toll structure on taxi and FHV drivers, see the discussion in the reevaluation of environmental justice.

Table 6.3 - Comparison of Toll Policy for Taxis and FHVs, Final EA and Adopted Toll Structure

TOLL POLICY	FINAL EA TOLLING SCENARIOS								ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	Modified G	
Taxi Toll Policy	All Entries	Once per Day	Exempt	All Entries	Exempt	Once per Day	All Entries	Once per Day	$1.25 per trip toll on trips to, within, or from the CBD*
High-Volume FHV Toll Policy			Up to 3 Times Daily		Up to 3 Times Daily				$2.50 per trip toll on trips to, within, or from the CBD*
Peak Toll Rate	$9	$10	$14	$19	$23	$23	$12	$12	$15

Note: * The per-trip tolls for taxis and FHVs in the adopted toll structure would be equivalent to the auto peak rate of $15 (based on NYC Taxi and Limousine Commission analysis of trips made by TLC-licensed vehicles in May 2023: for taxis the average number of trips with passengers to/from/within the CBD is 12, and for FHVs it is 6).

*Table 6.4 - Predicted VMT Changes for Taxis/FHVs (vs. No Action) (2023), Final EA and Adopted Toll Structure**

LOCATION	FINAL EA TOLLING SCENARIOS								ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	Modified G	
Manhattan CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)	+10,203 (+3.1%)	--904 (-0.3%)
New York City	-128,847 (-5.1%)	-29,731 (-1.2%)	-84,406 (-3.4%)	-219,068 (-8.8%)	-130,412 (-5.2%)	-25,521 (-1.0%)	-147,687 (-5.9%)	-43,481 (-1.7%)	-40,040 (-1.6%)
28-County Study Area	-126,993 (-2.9%)	-14,028 (-0.3%)	-73,413 (-1.7%)	-217,477 (-5.0%)	-116,065 (-2.7%)	-4,888 (-1.0%)	-137,815 (-3.2%)	-23,213 (-0.5%)	-30,963 (-0.7%)

Notes: * See Final EA Table 6-30, pg. 6-63, Modified Tolling Scenario G discussed in Chapter 17 has been added.
Final EA tolling scenarios that limited daily tolling for taxis and FHVs to no more than once per day (Tolling Scenarios B, F, and Modified G) are shown with shading.

Movement of Goods and Services and Related Effects on Small Businesses

The Final EA included an assessment of the CBD Tolling Alternative's potential effects on movement of goods and services, including how the cost of the new toll might affect small businesses. While the new toll would increase the cost for some shippers, it would decrease it for others due to travel time savings, the potential for reduced costs associated with parking tickets, and other potential cost savings. Any cost increase would be distributed among multiple businesses because shippers typically serve multiple businesses on a journey. This is consistent with results observed in Singapore, London, and Stockholm.

The Final EA concluded that the Project would not result in adverse effects on business activity in the CBD, small businesses, or the cost of goods and services. As a Project enhancement, the Project Sponsors committed to establishing a Small Business Working Group. In addition, they committed to ensuring the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m., thus offering a lower-cost option for off-peak truck deliveries. With the adopted toll structure, the overnight toll rate for trucks and other vehicles is 75 percent lower than the

peak/off peak toll, at $6/$9 and $3.75 respectively. The overnight hours have been extended from those evaluated in the Final EA, from 9:00 p.m. to 5:00 a.m. on weekdays and 9:00 p.m. to 9:00 a.m. on weekends.

With the adopted toll structure, toll costs for trucks ($24 for small trucks and $36 for large trucks during the peak period) are within the range evaluated in the Final EA ($12 to $65 for small trucks and $12 to $82 for large trucks during the peak period) and the conclusions of the Final EA remain valid (see Table 6.5). The Project Sponsors commit to the enhancements described in the Final EA and FONSI. The Small Business Working Group held its first meeting on January 22, 2024. In addition, the overnight toll rates in the adopted toll structure were reduced beyond the commitment made in the Final EA for a longer time period (the adopted toll structure includes overnight period toll rates that are 75 percent lower than the respective peak toll rates from 9:00 p.m. to 5:00 a.m. on weekdays and 9:00 p.m. to 9:00 a.m. weekends).

Table 6.5 - Modified Final EA Table 6-31. Truck Treatment by Tolling Scenario – with the Adopted Toll Structure Added

PARAMETER	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Potential Crossing Credits								
Credit Toward the CBD Toll for Tolls Paid at Tunnels to the CBD	No	No	Yes – Low	Yes – High	Yes – High	Yes – High	No	Yes – Low
Credit Toward the CBD Toll for Tolls Paid at Bridges to Manhattan	No	No	No	No	No	Yes – High	No	No
Potential Exemptions and Limits (Caps) on Number of Tolls per Day								
Small and large trucks	No cap	Twice per day	No cap	No cap	No cap	Once per day	No cap	No cap
Approximate Toll Rate (Small Truck / Large Truck) *								
Peak	$18 / $28	$20 / $30	$28 / $42	$38 / $57	$46 / $69	$65 / $82	$12 / $12	$24 / $36
Off Peak	$14 / $21	$15 / $23	$21 / $32	$29 / $43	$35 / $52	$49 / $62	$9 / $9	
Overnight	$9 / $14	$10 / $15	$14 / $21	$19 / $29	$23 / $35	$33 / $41	$7 / $7	$6 / $9

* Toll rates are using E-ZPass and are rounded. For all tolling scenarios, different rates would apply for vehicles not using E-ZPass.

Neighborhood-Level Effects Near the 60th Street CBD Boundary

The Final EA included an assessment of the potential reductions in parking demand to the area within the CBD but close to the boundary. The analysis considered whether changes in consumer demand could alter underlying real estate market forces at the neighborhood level, specifically focusing on off-street parking uses and demand. It concluded that reductions in the number of daily vehicle journeys (i.e., round trips) to the CBD would result in decreases in parking demand just south of the 60th Street CBD boundary that could jeopardize the viability of one or more parking facilities in that area. The potential closure of parking garages in that area would not create a climate of disinvestment that could lead to adverse effects on neighborhood character. With the adopted toll structure, the predicted reduction in the number of daily vehicles (1,138) would be within the range evaluated in the Final EA (728 to 1,841) (see Table 6.6), and the conclusions of the Final EA remain valid.

The MTA Reform and Traffic Mobility Act states that the City of New York must monitor the effects of the Project on parking within and around the Manhattan CBD, and a report must be completed 18 months after the Project commences. A parking study is being led by NYCDOT and work collecting pre-implementation baseline data is under way.

Table 6.7 presents information from the Final EA Table ES-5 summarizing the conclusions related to economic conditions, now modified to include the adopted toll structure.

Table 6.6 - Predicted Reductions in Daily Auto Journeys Between 55th and 60th Streets in the CBD (2023), Final EA and Adopted Toll Structure

REDUCTION	FINAL EA TOLLING SCENARIOS							ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	
Change in daily auto journeys to CBD vs. No Action Alternative*	-20,742 (-5%)	-16,173 (-4%)	-25,559 (-7%)	-38,744 (-10%)	-40,906 (-11%)	-31,784 (-8%)	-23,056 (-6%)	-25,297 (-7%)
Potential reduction in daily auto journeys with destinations in area generally between 55th and 60th Streets vs. No Action Alternative (4.5% of total)	-933 (-5%)	-728 (-4%)	-1,150 (-7%)	-1,743 (-10%)	-1,841 (-11%)	-1,430 (-8%)	-1,038 (-6%)	-1,138 (-7%)

* See Final EA Table 6-34, pg. 6-80.

FINDINGS

To consider the effect of the adopted toll structure on economic conditions, the Project Sponsors reviewed the parameters of the toll structure and BPM results for the adopted toll structure in comparison to results evaluated in the Final EA with respect to factors that affect economic conditions, such as movement of workforce, non-work-related trips, and effects on the taxi and FHV industry. The adopted toll structure would result in a small reduction in daily VMT for taxis and FHVs within the Manhattan CBD (a reduction of 0.3 percent), whereas the tolling scenarios evaluated in the Final EA that were found to have no adverse effect on taxi and FHV drivers increased VMT for taxis and FHVs in the CBD. However, the overall reduction of VMT within New York City and the region is within the range evaluated in the Final EA. The slight reduction in VMT within the CBD is not large enough to jeopardize employment of taxi and FHV drivers and, because the overall reduction is within the range evaluated in the Final EA/FONSI, the effects are not adverse. As presented earlier, the toll rates and other parameters fall within the range evaluated in the Final EA. In addition, BPM results for the adopted toll structure for factors affecting economic conditions also fall within the range evaluated in the Final EA. Consequently, the conclusions of the Final EA remain valid. The Project Sponsors will implement the enhancement commitments described in the Final EA related to small businesses, and reduced overnight toll rates for trucks and all other vehicles.

Table 6.7 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
6 – Economic Conditions	Benefits	Regional economic benefits	28-county study area	Narrative	Economic benefit through congestion relief in terms of travel-time savings and travel-time reliability improvements, which would increase productivity and utility, as well as safety improvements and reduced vehicle operating costs associated with reductions in congestion.							No	**No mitigation needed**. Beneficial effects	Same as Final EA	No	**No mitigation needed**. Beneficial effects
	Economic Effects of Toll Costs	Cost of new toll for workers and businesses in the CBD that rely on vehicles	Manhattan CBD	Narrative	No adverse effects to any particular industry or occupational category in the Manhattan CBD. Given the high level of transit access in the CBD and high percentage of transit share, the toll would affect only a small percentage of the overall workforce. This would not adversely affect operations of businesses in the Manhattan CBD or the viability of any business types, including the taxi/FHV industry.							No	**No mitigation needed.** No adverse effects **Enhancements** The Project Sponsors commit to establishing a Small Business Working Group (SBWG) that will meet 6 months prior and 6 months after Project implementation, and annually thereafter, to solicit ongoing input on whether and how businesses are being affected. As part of mitigation for other topics, TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will also benefit some workers and businesses.	Same as Final EA	No	**No mitigation needed.** No adverse effects The Project Sponsors will implement the Enhancements described in the Final EA.
	Price of Goods	Cost of new toll would not result in changes in the cost of most consumer goods	Manhattan CBD	Narrative	Not anticipated to result in meaningful change in cost for most consumer goods. Any cost increase associated with the new toll in the CBD Tolling Alternative that would be passed along to receiving businesses would be distributed among several customers per toll charge (since trucks make multiple deliveries) especially for businesses, including small businesses and micro-businesses, receiving smaller deliveries. This would minimize the cost to any individual business. Some commodity sectors (construction materials, electronics, beverages) are more prone to increases due to less competition within delivery market.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed.** No adverse effects
	Taxi and FHV Industry*	Depending on the tolling scenario, the toll could reduce taxi and FHV revenues due to a reduction in taxi/FHV VMT with passengers within the CBD. While this could adversely affect individual drivers (see "Environmental Justice"), the industry would remain viable overall.	28-county study area	Net change in daily taxi/FHV VMT regionwide	-126,993 (-2.9%)	-14,028 (-0.3%)	-73,413 (-1.7%)	-217,477 (-5.0%)	-116,065 (-2.7%)	-4,888 (-1.0%)	-137,815 (-3.2%)	No	**No mitigation needed.** No adverse effects (see "Environmental Justice" for mitigation related to effects on taxi and FHV drivers).	-30,963 (-0.7%)	No	**No mitigation needed.** No adverse effects
				Net change in daily taxi/FHV VMT in the CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)			-904 (-0.3%)		
	Local Economic Effects	Changes in parking demand near the 60th Street CBD boundary	Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street Manhattan CBD boundary (including increases just north of 60th Street and decreases just to the south) could jeopardize the viability of one or more parking facilities in the area south of 60th Street but would not create a climate of disinvestment that could lead to adverse effects on neighborhood character.							No	**No mitigation needed**. No adverse effects	Same as Final EA	No	**No mitigation needed.** No adverse effects

Note:

* The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber)

Other Analyses: Parks and Recreational Resources (EA Chapter 7), Historic and Cultural Resources (EA Chapter 8), Visual Resources (EA Chapter 9)

Chapters 7, 8, and 9 of the Final EA explored the effects on three analysis areas—parks and recreational resources, historic and cultural resources, and visual resources, respectively—from the installation of the tolling infrastructure and tolling system equipment that would be used for the CBD Tolling Program. Those chapters of the Final EA concluded the following:

- **Parks and recreational resources:** The CBD Tolling Alternative would not result in adverse effects on parks and recreational resources. Except for Central Park, the CBD Tolling Alternative would not place tolling infrastructure or tolling system equipment within mapped parkland. The CBD Tolling Alternative tolling infrastructure or tolling system equipment within mapped parkland. The CBD Tolling Alternative would have a *de minimis* impact on Central Park and the High Line (see also the discussion of the Final Section 4(f) Evaluation in section 19 of this reevaluation).
- **Historic and cultural resources:** The Project would not result in any direct or indirect effects on historic properties that would alter the characteristics of a historic property that qualify it for inclusion in the National Register of Historic Places, and the Project would have No Adverse Effect on historic and cultural resources.
- **Visual resources:** The visual changes introduced by the CBD Tolling Alternative would be minimal in the context of the urban landscape and would not result in adverse effects on visual quality as perceived by viewers. Therefore, the CBD Tolling Alternative would have a neutral effect on viewer groups.

The adopted toll structure would use the same tolling system equipment and infrastructure described and evaluated in the Final EA. Construction for the Project began in July 2023. Construction of tolling infrastructure and tolling system equipment is largely complete. Power and communications are nearing completion and testing is under way. With the same infrastructure and equipment and construction activities as evaluated in the Final EA, the conclusions of the Final EA for these analysis areas remain valid and no further analysis is needed. **Tables 7.1, 8.1, and 9.1** present information from the Final EA Table ES-5 summarizing the conclusions related to these topics, now modified to include the adopted toll structure.

FINDINGS

The Final EA considered the effects from installation of tolling infrastructure and tolling system equipment related to parks and recreational resources, historic and cultural resources and visual resources. The adopted toll structure would have the same construction activities and the same permanent tolling infrastructure and tolling system equipment described and evaluated in the Final EA. The effects of the adopted toll structure are the same as with all of the tolling scenarios evaluated in the Final EA/FONSI. Consequently, for these areas, the conclusions of the Final EA remain valid, and no additional mitigation measures are needed. The Project Sponsors will implement the mitigation commitments described in the Final EA.

Table 7.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
7 – Parks and Recreational Resources		New tolling infrastructure, tolling system equipment, and signage in the southern portion of Central Park	Manhattan CBD	Narrative	The Project would replace four existing streetlight poles at three detection locations in Central Park near 59th Street and on two adjacent sidewalks outside the park's wall. These poles would be in the same locations as existing poles and would not reduce the amount of park space or affect the features and activities of the park. The Project would also place tolling infrastructure beneath the structure of the High Line, outside the park area atop the High Line structure. Following consideration of public input received during the public comment period, FHWA concluded that the CBD Tolling Alternative would have a *de minimis* impact on Central Park and the High Line.							No	**No mitigation needed.** Refer to **Chapter 7, "Parks and Recreational Resources,"** for a listing of measures to avoid adverse effects to parks.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** The Project Sponsors will implement measures described in the Final EA.

Table 8.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
8 – Historic and Cultural Resources		New tolling infrastructure and tolling system equipment on or near historic properties	45 historic properties within the Project's Area of Potential Effects (APE)	Narrative	Based on a review of the Project in accordance with Section 106 of the National Historic Preservation Act, FHWA has determined that the Project would have No Adverse Effect on historic properties and the State Historic Preservation Office has concurred.							No	**No mitigation needed.** Refer to **Chapter 8, "Historic and Cultural Resources,"** for a listing of measures to avoid adverse effects to historic properties.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** The Project Sponsors will implement the measures described in the Final EA.

Table 9.1 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
9 – Visual Resources		Changes in visual environment resulting from new tolling infrastructure and tolling system equipment	Area of visual effect	Narrative	Infrastructure and equipment would be similar in form to streetlight poles, sign poles, or similar structures already in use throughout New York City. Cameras included in the array of tolling system equipment would use infrared illumination at night to allow images of license plates to be collected without any need for visible light. The Project would have a neutral effect on viewer groups and no adverse effect on visual resources							No	**No mitigation needed**. o adverse effects	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	**No mitigation needed.** No adverse effects.

10 Air Quality

Chapter 10 of the Final EA presented the assessment of the CBD Tolling Alternative's effects on air quality, air pollution, and greenhouse gas (GHG) emissions. The Final EA evaluated regional "criteria" pollutants (i.e., pollutants for which National Ambient Air Quality Standards [NAAQS] apply), mobile source air toxic (MSAT) and GHG emissions, as well as potential effects at local intersections and highway segments. This section compares the air quality effects of the adopted toll structure to those predicted in the Final EA. The Final EA used Tolling Scenario A as the representative scenario for the mesoscale analysis because it would result in the smallest reduction of VMT. This allows FHWA to assume that a scenario that reduces VMT more than Tolling Scenario A would result in lower overall air quality emissions. Additional information is provided in Appendix 10.

METHODOLOGY

Final EA Methodology

Mesoscale Analysis

1. Mesoscale analyses of criteria air pollutants, MSATs, and GHGs were conducted for a 12-county study area (see Final EA page 10-11). It included the 10-county area under the purview of NYMTC, which is the Metropolitan Planning Organization (MPO) for New York City, as well as the two counties in New Jersey with the greatest potential changes in VMT due to the Project (greatest increase and decrease). No Connecticut counties were analyzed because they were predicted to see decreases in VMT. The 12-county study area included the following:
    - New York City – Bronx, Kings (Brooklyn), New York (Manhattan), Queens, Richmond (Staten Island)
    - Long Island – Nassau, Suffolk
    - New York North of New York City – Putnam, Rockland, Westchester
    - New Jersey – Bergen, Hudson.
2. The version of the U.S. Environmental Protection Agency (USEPA) emissions model current at the time the regional analysis for the EA was begun, MOVES2014b, was used to estimate the mobile source emission factors for the mesoscale, MSAT, and GHG analyses.
3. Final EA Tolling Scenario A was analyzed, because it had the smallest reduction of VMT compared to the No Action Alternative and would therefore have the lowest beneficial effect on regional air quality.

4. For the No Action Alternative and Tolling Scenario A, MOVES was run using post-processed VMT[5], speeds, and vehicle mix, as well as the latest site-specific input data from NYSDEC and the North Jersey Transportation Planning Authority (NJTPA), which is the MPO for the New Jersey counties in the study area.

Microscale Analysis

1. Identified the intersections for analysis from the traffic analysis presented in Final EA Subchapter 4B, "Highways and Local Intersections." This included 102 intersections in a total of 15 different study areas.
2. Conducted screening analysis for pollutants of concern on a localized (microscale) level: carbon monoxide (CO), particulate matter $(PM)_{2.5}$, and PM_{10}. The screening was conducted using the criteria from NYSDOT's The Environmental Manual (TEM), Chapter 1.1 and USEPA guidance (see the Final EA, Chapter 10, Sections 10.1.7.3 and 10.1.7.4) (see Final EA Sections 10.1.7.2 and 10.1.7.3).
3. All 102 intersections passed the screening analysis, and no detailed air quality analysis (modeling) was necessary.

Highway Link Analysis

1. Identified highway link locations and tolling scenario for analysis, based on the following:
    - Location with highest total AADT in any tolling scenario
    - Location of community concern, in worst-case scenario
    - Location with highest truck increase in any tolling scenario.
2. Conducted modeling of particulate matter using the regional model current at the time of the highway link analysis, USEPA's MOVES3 and AERMOD models.

Reevaluation Methodology

Mesoscale Analysis

1. The analysis was conducted for the same 12-county study area as in the Final EA.
2. USEPA's current emission model, MOVES3.1, was used to estimate the mobile source emission factors for the mesoscale, MSAT, and GHG analyses in the reevaluation.
3. For the No Action Alternative and the adopted toll structure, MOVES3.1 was run using VMT (direct output from the BPM for the Project's 2023 analysis year, without post processing), speeds, vehicle mix, as well as the latest site-specific input data from NYSDEC and NJTPA.

[5] The NYMTC Post Processor software was used for the 10-county NYMTC area for the Final EA/FONSI. Information on post-processing adjustments can be found in NYMTC's Final Adopted *2023 Conformity Determination*, pg. 23, at: https://www.nymtc.org/en-us/Required-Planning-Products/Transportation-Conformity/Transportation-Conformity-Determination-Documents-adopted.

Microscale Analysis

1. Using the same information on incremental traffic volumes from the adopted toll structure at the 102 intersections as was used for the traffic analysis reevaluation, conducted screening analysis using the same methodology as the Final EA
2. As in the Final EA, all 102 intersections passed the screening analysis, and no detailed air quality analysis (modeling) was necessary.

Highway Link Analysis

1. Determined if locations for the adopted toll structure remain the same as the locations evaluated in the Final EA, based on the same factors:
    - Highest total AADT (based on BPM results for adopted toll structure)
    - Community concern
    - Highest truck increase (based on BPM results for adopted toll structure).
2. For the locations evaluated in the Final EA, reviewed whether the applicable criteria (i.e., AADT or truck increments) with the adopted toll structure are higher than those analyzed in the Final EA.
3. For any locations identified in Step 1 that are different than those studied in the Final EA, or any Final EA locations where the increase in traffic was greater than that analyzed in the EA, conducted modeling of PM using USEPA's MOVES3.1 and AERMOD models.

The modeling approach for the reevaluation and models used for the Final EA are summarized in Table 10.1 below.

Table 10.1 - Summary of Models Used for Final EA and Reevaluation Methodology

TOPIC	LOCATION IN FINAL EA, CHAPTER 10, "AIR QUALITY"	MODEL(S) USED IN FINAL EA	MODELING APPROACH FOR REEVALUATION
Mesoscale Analysis	Methodology – Section 10.1.7.1, page10-10 Environmental Consequences – Section 10.3.2.1, page 10-21	▪ **MOVES2014b** (current version at time of analysis – no longer being updated or supported for use) ▪ VMT from NYMTC's post-processor (in coordination with NYMTC and the ICG, this step was taken to show that the Project would be consistent with NYMTC's conformity analysis because at the time the analysis began, the Project was not yet on the conforming plan and Transportation Improvement Plan [TIP])	▪ **MOVES3.1** (latest update to MOVES3 – https://www.epa.gov/moves/moves3-update-log) ▪ VMT direct from BPM (used Final EA network, VMT post-processing not required because the Project was added to the conforming plan and TIP and included in NYMTC conformity determination ▪ in 2022)
Microscale Analysis	Methodology – 10.1.7.2, page 10-14 Environmental Consequences – Section 10.3.2.2, page 10-42	▪ Screening only; no modeling required	▪ Screening only; no modeling required
Highway Link Analysis	Methodology – 10.1.7.5, page 10-16 Environmental Consequences – Section 10.3.2.3, page 10-46	▪ **MOVES3** (current version at time of analysis) ▪ **AERMOD version 21112** (current version at time of analysis – no longer being updated or supported for use) ▪ VMT direct from BPM	▪ **MOVES3.1** (latest update to MOVES3 - https://www.epa.gov/moves/moves3-update-log) ▪ **AERMOD** version 23132 (current version) ▪ VMT direct from BPM (Final EA Network)

ANALYSIS AND RESULTS

Mesoscale Analysis

The Final EA concluded that the CBD Tolling Alternative would benefit air quality by reducing emissions related to criteria pollutants, MSATs, and GHGs overall in the 12-county study area.

For the reevaluation, the mesoscale analysis shows that the adopted toll structure would reduce emissions related to the criteria pollutants, MSATs, and GHG the same as or more than Tolling Scenario A. The adopted toll structure would benefit regional air quality by reducing criteria pollutants, MSATs, and GHG overall in the 12-county study area. Tables 10.2 through 10.4 present the results of the mesoscale air quality analysis for the adopted toll structure in comparison to the results for Tolling Scenario A from the Final EA. Additional information is provided in Appendix 10. Based on these analyses, the conclusions in the Final EA for both 2023 and 2045 remain valid.

To compare values between the Final EA and the reevaluation, the comparison is made between the change from the No Action Alternative and the tolling scenario or adopted toll structure (percent difference/change) due to the use of NYMTC's post processor for the Final EA.

Furthermore, the Project continues to be included in NYMTC's regional emissions analysis and the currently conforming Plan and TIP. The most recent conformity determination on the Plan and TIP was made by FHWA and the Federal Transit Administration on January 4, 2024.

Mesoscale Analysis by County – Criteria Pollutants

In the Final EA/FONSI, Tolling Scenario A was used for the county-level emissions analysis for criteria pollutants, because it reduced VMT the least and would represent the highest level of emissions of all the scenarios. In comparing the adopted toll structure to the results in the Final EA/FONSI, the following conclusions are noted (see Table 10.3, which provides results for Tolling Scenario A and the adopted toll structure by county and pollutant).

On a county-level basis, the Final EA saw the following for criteria pollutants:

- The Manhattan CBD along with New York (Manhattan), Queens, Kings (Brooklyn), Rockland, and Hudson Counties saw decreases in all pollutants with the Project.
- Suffolk, Westchester, and Putnam Counties saw mixed results, with some pollutants increasing slightly and some pollutant burdens decreasing with the Project.
- The Bronx, Richmond (Staten Island), Nassau, and Bergen Counties saw increases in all pollutants with the Project.

For the adopted toll structure, the results for criteria pollutants are as follows:

- The Manhattan CBD along with New York (Manhattan), Nassau, Westchester, Rockland, and Hudson Counties have estimated decreases in all pollutants with the Project.
- Queens, Bronx, Kings (Brooklyn) and Putnam Counties have mixed results, with some pollutants increasing slightly and some pollutant burdens decreasing with the Project.
- Richmond (Staten Island), Suffolk, and Bergen Counties have estimated increases in all pollutants with the Project.

Mesoscale Analysis by County - MSATs

In Final EA/FONSI, Tolling Scenario A was used for the county-level emissions analysis for MSAT emissions, because it reduced VMT the least and would represent the highest level of emissions of all the scenarios. In comparing the adopted toll structure to the results in the Final EA/FONSI, the following conclusions are noted (see Table 10.4 below, which provides data for Tolling Scenario A and the adopted toll structure by county and pollutant).

On a county-level basis, the Final EA saw the following for MSATs:

- The Manhattan CBD along with New York (Manhattan), Queens, Kings (Brooklyn), Westchester, Rockland, and Hudson Counties saw decreases in all MSATs with the Project.
- The Bronx, Richmond (Staten Island), Nassau, Suffolk, Putnam, and Bergen Counties estimate increases in all MSATs with the Project.

For the adopted toll structure, the results for MSATs are as follows:

- The Manhattan CBD along with New York (Manhattan), Nassau, Westchester, Rockland, Putnam and Hudson Counties have estimated decreases in all pollutants with the Project.
- Queens, Bronx, and Kings (Brooklyn) have mixed results, with some pollutants increasing slightly and some pollutant burdens decreasing with the Project.
- Richmond (Staten Island), Suffolk, and Bergen Counties have estimated increases in all pollutants with the Project.

Table 10.2 - Final EA Table 10-7. Mesoscale Emission Burdens, CBD Tolling Alternative (Tolling Scenario A, tons/year) – With the Adopted Toll Structure (Analysis Year 2023)

POLLUTANT	FINAL EA			ADOPTED TOLL STRUCTURE		
	No Action Alternative	CBD Tolling Alternative (Tolling Scenario A)	% Difference	No Action Alternative	Adopted Toll Structure	% Difference
Daily Vehicle-Miles Traveled (miles/day) – BPM Output for 12-County Study Area	146,956,932	146,556,877	-0.3%	146,956,932	146,387,802	-0.4%
Daily Vehicle-Miles Traveled (miles/day) – Post Processed for 12-County Study Area	182,736,632	182,143,856	-0.3%	N/A	N/A	N/A
Volatile Organic Compounds (VOC)	17,698	17,667	-0.2%	6,567	6,541	-0.4%
Nitrogen Oxides (NO_x)	23,956	23,864	-0.4%	12,437	12,378	-0.5%
Carbon Monoxide (CO)	227,726	227,074	-0.3%	93,881	93,220	-0.7%
Particulate Matter (PM_{10})	5,884	5,828	-1.0%	2,878	2,849	-1.0%
Particulate Matter ($PM_{2.5}$)	1,452	1,441	-0.7%	604	599	-0.8%
Carbon Dioxide Equivalents (CO_2e)	32,445,206	32,236,481	-0.6%	17,461,889	17,360,966	-0.6%

Note: For the Final EA, post processed vehicle-miles traveled were used for analysis. They were generated off of the NYMTC BPM outputs using the NYMTC Post Processor software. They are higher than the NYMTC BPM outputs due to a series of seasonal adjustments. NYMTC's Transportation Conformity Determination includes details on these adjustments: https://www.nymtc.org/Required-Planning-Products/Transportation-Conformity/Transportation-Conformity-Determination-Documents-adopted. Post processing is conducted in accordance with NYMTC's procedures to generate maximum potential worst-case conditions for the Plan and TIP conformity analyses only when a Project has not yet been included in the conformity analysis of an adopted Plan and TIP – as was the case at the time the mesoscale analysis was begun for the Final EA. Post processing was not conducted for the adopted toll structure in the reevaluation, as the Project is now part of the conforming Plan and TIP for which NYMTC's 2022 conformity analyses were completed and subsequent conformity analyses.

Table 10.3 - Final EA Table 10-8. Mesoscale Emission Burden Percentage Changes by County, CBD Tolling Alternative (Tolling Scenario A, Analysis Year 2023) – With the Adopted Toll Structure Below

POLLUTANT	FINAL EA TOLLING SCENARIO A – PERCENT CHANGE FROM NO ACTION ALTERNATIVE (FINAL EA NETWORK RUN POST-PROCESSED, ANALYZED IN MOVES2014B)												
	New York												
	CBD Only	Entire County	Queens	Bronx	Kings	Richmond	Nassau	Suffolk	Westchester	Rockland	Putnam	Hudson	Bergen
Daily Vehicle-Miles Traveled	-11.56%	-5.88%	-0.36%	0.15%	-0.74%	1.73%	0.03%	-0.03%	-0.22%	-0.17%	0.28%	-2.24%	0.88%
Volatile Organic Compounds (VOC)	-4.96%	-3.29%	-0.32%	0.03%	-0.32%	0.44%	0.05%	0.02%	0.21%	-0.05%	-0.03%	-0.66%	0.20%
Nitrogen Oxides (NO_x)	-9.54%	-5.96%	-0.56%	0.09%	-0.68%	1.26%	0.09%	0.00%	-0.25%	-0.12%	0.37%	-1.85%	0.63%
Carbon Monoxide (CO)	-7.58%	-4.58%	-0.37%	0.02%	-0.51%	0.89%	0.03%	-0.03%	-0.13%	-0.05%	0.00%	-1.02%	0.49%
Particulate Matter (PM_{10})	-12.16%	-9.75%	-1.23%	0.30%	-1.00%	2.12%	0.19%	0.11%	-0.32%	-0.36%	0.31%	-3.86%	0.74%
Particulate Matter ($PM_{2.5}$)	-11.37%	-8.52%	-0.99%	0.20%	-0.90%	1.80%	0.14%	0.06%	-0.23%	-0.25%	0.26%	-3.00%	0.69%
Carbon Dioxide Equivalents (CO_2e)	-11.48%	-7.92%	-0.84%	0.15%	-0.88%	1.76%	0.15%	0.03%	-0.40%	-0.23%	0.17%	-3.03%	0.80%

Source: WSP, 2022.

POLLUTANT	ADOPTED TOLL STRUCTURE – PERCENT CHANGE FROM NO ACTION ALTERNATIVE (FINAL EA NETWORK RUN, ANALYZED IN MOVES3.1)												
	New York												
	CBD Only	Entire County	Queens	Bronx	Kings	Richmond	Nassau	Suffolk	Westchester	Rockland	Putnam	Hudson	Bergen
Daily Vehicle-Miles Traveled	-8.90%	-5.47%	-0.68%	0.15%	-0.61%	2.35%	-0.10%	0.00%	-0.59%	-0.35%	-0.06%	-2.23%	1.11%
Volatile Organic Compounds (VOC)	-5.44%	-4.27%	-0.36%	-1.11%	-0.45%	0.94%	-0.05%	0.01%	-0.25%	-0.06%	0.02%	-2.08%	0.45%
Nitrogen Oxides (NO_x)	-7.41%	-4.85%	0.67%	1.48%	0.03%	2.47%	-0.09%	0.02%	-0.31%	-0.21%	-0.05%	-4.96%	0.92%
Carbon Monoxide (CO)	-10.83%	-6.91%	-0.92%	-0.42%	-0.99%	2.24%	-0.10%	0.01%	-0.60%	-0.32%	0.00%	-3.59%	1.05%
Particulate Matter (PM_{10})	-11.02%	-7.26%	-0.65%	0.94%	-1.08%	2.70%	-0.12%	0.07%	-0.58%	-0.22%	0.16%	-6.34%	0.94%
Particulate Matter ($PM_{2.5}$)	-10.49%	-6.59%	-0.31%	0.95%	-0.73%	2.51%	-0.11%	0.06%	-0.46%	-0.23%	0.06%	-5.39%	1.00%
Carbon Dioxide Equivalents (CO_2e)	-11.00%	-6.46%	-0.56%	0.34%	-0.75%	2.30%	-0.10%	0.01%	-0.54%	-0.31%	-0.02%	-3.91%	1.06%

Source: WSP, 2024.

Yellow highlights indicate an increase compared to the No Action Alternative.

Table 10.4 - Final EA Table 10-11. Mobile Source Air Toxics Emission Burden Percentage Changes by County, CBD Tolling Alternative (Tolling Scenario A, Analysis Year 2023) – With the Adopted Toll Structure Below

POLLUTANT	FINAL EA TOLLING SCENARIO A – PERCENT CHANGE FROM NO ACTION ALTERNATIVE (FINAL EA NETWORK RUN POST-PROCESSED, ANALYZED IN MOVES2014B)												
	New York												
	CBD Only	Entire County	Queens	Bronx	Kings	Richmond	Nassau	Suffolk	Westchester	Rockland	Putnam	Hudson	Bergen
Daily Vehicle-Miles Traveled	-11.56%	-5.88%	-0.36%	0.15%	-0.74%	1.73%	0.03%	-0.03%	-0.22%	-0.17%	0.28%	-2.24%	0.88%
1,3-Butadiene	-11.82%	-9.11%	-1.12%	0.17%	-0.99%	1.96%	0.22%	0.07%	-0.25%	-0.26%	0.30%	-3.93%	0.81%
Acetaldehyde	-11.78%	-9.09%	-1.13%	0.16%	-0.99%	1.95%	0.26%	0.08%	-0.25%	-0.27%	0.30%	-3.96%	0.79%
Acrolein	-11.79%	-9.25%	-1.17%	0.15%	-1.01%	1.98%	0.29%	0.10%	-0.26%	-0.28%	0.29%	-4.05%	0.77%
Benzene	-10.91%	-7.37%	-0.74%	0.05%	-0.82%	1.56%	0.13%	0.01%	-0.19%	-0.17%	0.27%	-2.48%	0.70%
Diesel PM	-11.79%	-8.64%	-0.94%	0.20%	-0.94%	1.99%	0.23%	0.10%	-0.28%	0.00%	0.28%	-3.44%	0.74%
Ethylbenzene	-8.58%	-6.14%	-0.65%	0.07%	-0.63%	1.01%	0.12%	0.03%	-0.11%	-0.12%	0.15%	-1.57%	0.40%
Formaldehyde	-11.78%	-9.18%	-1.15%	0.16%	-1.00%	1.96%	0.29%	0.09%	-0.26%	-0.28%	0.29%	-4.02%	0.77%
Naphthalene	-11.76%	-9.06%	-1.13%	0.14%	-0.99%	1.95%	0.27%	0.08%	-0.25%	-0.27%	0.29%	-3.96%	0.78%
Polycyclic Organic Matter	-11.59%	-8.46%	-0.99%	0.09%	-0.96%	1.84%	0.20%	0.04%	-0.24%	-0.25%	0.30%	-3.62%	0.82%

Source: WSP, 2022.

POLLUTANT	ADOPTED TOLL STRUCTURE – PERCENT CHANGE FROM NO ACTION ALTERNATIVE (FINAL EA NETWORK RUN, ANALYZED IN MOVES3.1)												
	New York												
	CBD Only	Entire County	Queens	Bronx	Kings	Richmond	Nassau	Suffolk	Westchester	Rockland	Putnam	Hudson	Bergen
Daily Vehicle-Miles Traveled	-8.90%	-5.47%	-0.68%	0.15%	-0.61%	2.35%	-0.10%	0.00%	-0.59%	-0.35%	-0.06%	-2.23%	1.11%
1,3-Butadiene	-11.26%	-6.99%	-0.80%	0.33%	-0.93%	2.35%	-0.11%	0.03%	-0.59%	-0.28%	-8.33%	-5.84%	1.01%
Acetaldehyde	-6.76%	-4.80%	0.24%	0.80%	-0.33%	2.39%	-0.10%	0.03%	-0.45%	-0.25%	-6.72%	-8.19%	0.91%
Acrolein	-7.96%	-5.10%	0.24%	1.01%	-0.27%	2.09%	-0.09%	0.02%	-0.39%	-0.25%	-5.90%	-7.10%	0.90%
Benzene	-10.29%	-6.48%	-0.74%	-0.37%	-0.87%	1.72%	-0.09%	0.02%	-0.48%	-0.29%	-8.50%	-4.67%	1.04%
Diesel PM	-8.60%	-4.84%	1.09%	1.22%	0.45%	2.31%	-0.06%	0.06%	-0.23%	-0.17%	-4.43%	-4.89%	1.04%
Ethylbenzene	-6.34%	-4.80%	-0.48%	-0.02%	-0.56%	1.09%	-0.06%	0.02%	-0.29%	-0.27%	-8.62%	-5.71%	0.99%
Formaldehyde	-7.09%	-4.83%	0.12%	0.79%	-0.37%	2.20%	-0.10%	0.02%	-0.45%	-0.27%	-6.48%	-8.50%	0.93%
Naphthalene	-9.13%	-5.61%	-0.26%	0.77%	-0.56%	2.06%	-0.10%	0.02%	-0.48%	-0.28%	-6.86%	-6.99%	0.96%
Polycyclic Organic Matter	-9.43%	-5.68%	-0.24%	0.80%	-0.51%	2.07%	-0.10%	0.02%	-0.46%	-0.27%	-6.69%	-6.40%	0.99%

Source: WSP, 2024.

Yellow highlights indicate an increase compared to the No Action Alternative.

Microscale Analysis

For both the Final EA and the reevaluation, all 102 local intersections passed the screening analysis. As such, no further analysis was needed. Table 10.5 illustrates the results of the microscale screening analysis for the Final EA and the adopted toll structure. Additional information is provided in Appendix 10.

Table 10.5 - Final EA Table 10-13. CO and $PM_{2.5}/PM_{10}$ Microscale Screening Results 2023, CBD Tolling Alternative (Tolling Scenario C and Tolling Scenario D) – With the Adopted Toll Structure Added

LOCATION	INTERSECTION	FINAL EA		ADOPTED TOLL STRUCTURE	
		CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING	CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING
Downtown Brooklyn	Flatbush Ave & Tillary St	Passed	Passed	Passed	Passed
	Adams St & Tillary St	Passed	Passed	Passed	Passed
	Old Fulton St & Vine St	Passed	Passed	Passed	Passed
Lincoln Tunnel (Manhattan)	Ninth Ave & West 33rd St	Passed	Passed	Passed	Passed
	Dyer Ave & West 34th St	Passed	Passed	Passed	Passed
	Twelfth Ave & West 34th St	Passed	Passed	Passed	Passed
	Eleventh Ave & West 42nd St	Passed	Passed	Passed	Passed
	Dyer Ave & West 36th St	Passed	Passed	Passed	Passed
	Tenth Ave & West 33rd St	Passed	Passed	Passed	Passed
	Eleventh Ave & West 34th St	Passed	Passed	Passed	Passed
	Tenth Ave & West 41st St	Passed	Passed	Passed	Passed
	Twelfth Ave & West 42nd St	Passed	Passed	Passed	Passed
Long Island City (Queens)	Pulaski Bridge/11th St & Jackson Ave	Passed	Passed	Passed	Passed
	11th St & 48th Ave	Passed	Passed	Passed	Passed
	50th Ave at Vernon Blvd	Passed	Passed	Passed	Passed
	Green St & McGuiness Blvd	Passed	Passed	Passed	Passed
	McGuinness Blvd & Freeman St	Passed	Passed	Passed	Passed
	21st St & 49th Ave	Passed	Passed	Passed	Passed
	11th St & Borden Ave	Passed	Passed	Passed	Passed
	Van Dam St & Queens-Midtown Tunnel Expwy	Passed	Passed	Passed	Passed
	Van Dam St & Borden Ave	Passed	Passed	Passed	Passed
	Jackson Ave/Northern Blvd & Queens Plaza	Passed	Passed	Passed	Passed
	Thomson Ave & Dutch Kills St	Passed	Passed	Passed	Passed
	Thomson Ave & Dutch Kills St	Passed	Passed	Passed	Passed
	21st St & Queens Plaza N	Passed	Passed	Passed	Passed
Lower Manhattan (Manhattan)	Trinity Place & Edgar St	Passed	Passed	Passed	Passed
	Trinity Place & Rector St	Passed	Passed	Passed	Passed
	Hugh L. Carey Tunnel Entrance/Exit & West St	Passed	Passed	Passed	Passed
	Hugh L. Carey Tunnel Exit & West St & West Thames St	Passed	Passed	Passed	Passed
	Chambers St & Centre St	Passed	Passed	Passed	Passed
	Canal & Hudson Sts/Holl& Tunnel On-Ramp	Passed	Passed	Passed	Passed
	Canal St & Holl& Tunnel On-Ramp	Passed	Passed	Passed	Passed

LOCATION	INTERSECTION	FINAL EA		ADOPTED TOLL STRUCTURE	
		CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING	CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING
	Canal St S & West St	Passed	Passed	Passed	Passed
	West St & Albany St	Passed	Passed	Passed	Passed
	West St & Vesey St	Passed	Passed	Passed	Passed
	West St & Chambers St	Passed	Passed	Passed	Passed
	Canal St/Manhattan Bridge & Bowery	Passed	Passed	Passed	Passed
	Manhattan Bridge & Bowery	Passed	Passed	Passed	Passed
	Sixth Ave & Watts St	Passed	Passed	Passed	Passed
	Canal St & Sixth Ave/Laight St	Passed	Passed	Passed	Passed
New Jersey	14th St/Holl& Tunnel (E-W) & Marin Blvd (N-S)	Passed	Passed	Passed	Passed
	14th St (E-W) & Jersey Ave (N-S)	Passed	Passed	Passed	Passed
	12th St (E-W) & Jersey Ave (N-S)	Passed	Passed	Passed	Passed
	12th St/Holl& Tunnel (E-W) & Marin Blvd (N-S)	Passed	Passed	Passed	Passed
Queens-Midtown Tunnel (Manhattan)	East 37th St & Third Ave	Passed	Passed	Passed	Passed
	East 36th St & Second Ave	Passed	Passed	Passed	Passed
	East 34th St & Third Ave	Passed	Passed	Passed	Passed
	East 35th St & Third Ave	Passed	Passed	Passed	Passed
	East 34th St & Second Ave	Passed	Passed	Passed	Passed
	East 35th St & Second Ave	Passed	Passed	Passed	Passed
Red Hook (Brooklyn)	Hamilton Ave, Clinton St & West 9th St	Passed	Passed	Passed	Passed
	Hamilton Ave (northbound) & West 9th St	Passed	Passed	Passed	Passed
Robert F. Kennedy Bridge (Manhattan, the Bronx, Queens)	East 126th St & Second Ave	Passed	Passed	Passed	Passed
	East 125th St & Second Ave	Passed	Passed	Passed	Passed
	East 134th St & St. Ann's Ave	Passed	Passed	Passed	Passed
	St. Ann's Ave & Bruckner Blvd	Passed	Passed	Passed	Passed
	31st St & Astoria Blvd	Passed	Passed	Passed	Passed
	Hoyt Ave North & 31st St	Passed	Passed	Passed	Passed
	Hoyt Ave South & 31st St	Passed	Passed	Passed	Passed
Upper East Side (Manhattan)	East 60th St & Ed Koch Queensboro Bridge Exit	Passed	Passed	Passed	Passed
	East 60th St & Third Ave	Passed	Passed	Passed	Passed
	East 60th St & York Ave	Passed	Passed	Passed	Passed
	East 59th St & Second Ave	Passed	Passed	Passed	Passed
	East 60th St & Second Ave	Passed	Passed	Passed	Passed
	East 60th St & First Ave	Passed	Passed	Passed	Passed
	East 60th St & Lexington Ave	Passed	Passed	Passed	Passed
	East 60th St & Park Ave (northbound)	Passed	Passed	Passed	Passed

LOCATION	INTERSECTION	FINAL EA		ADOPTED TOLL STRUCTURE	
		CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING	CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING
	East 60th St & Park Ave (south- & westbound)	Passed	Passed	Passed	Passed
	East 60th St & Madison Ave	Passed	Passed	Passed	Passed
	East 62nd St & Ed Koch Queensboro Bridge Exit	Passed	Passed	Passed	Passed
	East 60th St & Fifth Ave	Passed	Passed	Passed	Passed
	East 63rd St & York Ave	Passed	Passed	Passed	Passed
	East 53rd St & Franklin D. Roosevelt Dr	Passed	Passed	Passed	Passed
	East 61st St & Fifth Ave	Passed	Passed	Passed	Passed
	East 65th St & Fifth Ave	Passed	Passed	Passed	Passed
	East 66th St & Fifth Ave	Passed	Passed	Passed	Passed
	East 79th St & Fifth Ave	Passed	Passed	Passed	Passed
	East 71st St & York Ave	Passed	Passed	Passed	Passed
Upper West Side (Manhattan)	West 72nd St & West End Ave	Passed	Passed	Passed	Passed
	West 61st St & West End Ave	Passed	Passed	Passed	Passed
	West 79th St & Riverside Drive	Passed	Passed	Passed	Passed
	West 56th St & Twelfth Ave	Passed	Passed	Passed	Passed
	West 56th St & West Side Hwy	Passed	Passed	Passed	Passed
	West 55th St & West Side Hwy	Passed	Passed	Passed	Passed
	West 55th St & Twelfth Ave	Passed	Passed	Passed	Passed
	West 55th St & West Side Hwy Arterial	Passed	Passed	Passed	Passed
	West 60th St & Broadway	Passed	Passed	Passed	Passed
	West 60th St & Columbus Ave	Passed	Passed	Passed	Passed
	West 60th St & Amsterdam Ave	Passed	Passed	Passed	Passed
	West 60th St & West End Ave	Passed	Passed	Passed	Passed
	West 61st St & Amsterdam Ave	Passed	Passed	Passed	Passed
	West 61st St & Columbus Ave	Passed	Passed	Passed	Passed
	West 61st St & Broadway	Passed	Passed	Passed	Passed
	West 61st St & Columbus Ave	Passed	Passed	Passed	Passed
	West 81st St & Central Park West	Passed	Passed	Passed	Passed
	West 66th St & Central Park West	Passed	Passed	Passed	Passed
	West 65th St & Central Park West	Passed	Passed	Passed	Passed
West Side Hwy / Rte 9A (Manhattan)	West 24th St & Twelfth Ave	Passed	Passed	Passed	Passed

LOCATION	INTERSECTION	FINAL EA		ADOPTED TOLL STRUCTURE	
		CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING	CO SCREENING	$PM_{2.5}/PM_{10}$ SCREENING
Little Dominican Republic (Manhattan)	West 179th St & Broadway	Passed	Passed	Passed	Passed
Lower East Side (Manhattan)	Park Row/Chatham Sq, Worth/Oliver St & Mott St	Passed	Passed	Passed	Passed
	Chatham Square & East Broadway	Passed	Passed	Passed	Passed
	Chatham Square/Bowery & Division St	Passed	Passed	Passed	Passed

Highway Link Analysis

In addition to the intersection screening analysis, a highway link screening analysis was conducted for potential CO effects at a location of community concern (FDR Drive at 10th Street); this location passed the screening and, therefore, no further analysis was required.

Based on the screening analyses, it was determined that the Project is not a project of air quality concern as defined in 40 CFR 93.123(b)(1); therefore, no hot-spot analysis for $PM_{2.5}$/PM_{10} was required. The Project meets the project-level conformity requirements and would not create any new or worsen any existing violation of the NAAQS or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones. Though all sites analyzed passed the particulate matter screening parameters established for the Project, in recognition of the association of particulate matter and health effects, it was decided to conduct hot-spot analyses on highway links throughout the study area to quantify the Project's impact on localized air quality levels.

Furthermore, through interagency consultation and to address community concerns, particulate matter hot-spot analyses were conducted on highway segments at three locations representing worst-case conditions (largest increases in truck traffic and highest AADT under the Project) and community concerns. According to the analyses, there were no violations of the NAAQS with the Project, and no further analysis is warranted. For the Final EA, highway link analyses for particulate matter (PM) effects were conducted at three sites:

- I-95 west of the George Washington Bridge, Tolling Scenario C – Highest total AADT in any scenario
- Cross Bronx Expressway at Macombs Road, Tolling Scenario B – Community concern
- Robert F. Kennedy (Triborough) Bridge Queens approach, Tolling Scenario E – Highest truck increase in any scenario

At all sites, predicted PM concentrations with the Project would be below the $PM_{2.5}$/PM_{10} NAAQS.

For the reevaluation, all highway links were evaluated to determine if those locations analyzed in the Final EA still represent worst-case conditions with the adopted toll structure. The findings are as follows (see also **Appendix 10**):

- **Highest total AADT:** I-95 west of the George Washington Bridge still represents the location with the highest AADT. As shown in **Table 10.6**, With the adopted toll structure, the AADT at this location would be higher than that analyzed in the Final EA (although total and incremental truck volumes would be lower than in the Final EA). Therefore, additional modeling was conducted using MOVES3.1. The modeling showed that the predicted PM concentrations with the adopted toll structure would still be below the applicable NAAQS (see **Table 10.7**). Therefore, the conclusions of the Final EA remain valid.
- **Community concern:** At the Cross Bronx Expressway at Macombs Road location, the AADT and truck volume changes with the adopted toll structure would be below the maximum increment analyzed in the Final EA, where the results were below the NAAQS, and no adverse effect was found. Therefore, no additional modeling was necessary, and the conclusions of the Final EA remain valid.

- **Highest truck increase:** The RFK Bridge Queens approach would still be the location with the largest truck increase. The truck volume changes at the RFK Bridge for the adopted toll structure are all below the maximum increment analyzed in the Final EA, where the results were below the NAAQS, and no adverse effect was found. Therefore, no additional modeling was necessary, and the conclusions of the Final EA remain valid.

Table 10.6 - Changes in AADT and Trucks (2023), Final EA and Adopted Toll Structure

LINK #	COUNTY	ROADWAY	NO ACTION		FINAL EA SCENARIO C		ADOPTED TOLL STRUCTURE	
			AADT	Trucks	AADT	Trucks	AADT	Trucks
268133 & 268131	Bergen	I-95 West of the George Washington Bridge	241,327	34,133	249,307	34,862	251,668	34,632
Change from No Action					7,980	729	10,341	499
Percent Change from No Action					3.3%	2.1%	4.3%	1.5%

Table 10.7 - Changes in Particulate Matter Concentrations (2023), Final EA and Adopted Toll Structure – I-95 West of the George Washington Bridge

FINAL EA TABLE*	POLLUTANT	FINAL EA		ADOPTED TOLL STRUCTURE		NAAQS ($\mu g/m^3$)
		No Action Alternative – MOVES3 ($\mu g/m^3$)	Final EA Tolling Scenario C ($\mu g/m^3$)	No Action Alternative – MOVES3.1 ($\mu g/m^3$)	Adopted Toll Structure ($\mu g/m^3$)	
Table 1	PM_{10}	105	107	88	89	150
Table 2	$PM_{2.5}$ 24-hour	29.5	29.7	27.8	28.0	35.0
Table 3	$PM_{2.5}$ Annual	11.1	11.2	10.8	10.9	12.0

* See Final EA Appendix 10D, page 10-52.

Note: No Action pollutant concentrations are lower than in the Final EA because MOVES 3.1 (latest version) was used with the latest input files (vehicle age distribution, vehicle mix) and meteorological data in AERMOD for the reevaluation. Incremental changes from the No Action under the adopted toll structure are the same or less than those for Final EA Tolling Scenario C.

Table 10.8 presents information from the Final EA Table ES-5 summarizing the conclusions related to air quality, now modified to include the adopted toll structure.

FINDINGS

The Final EA evaluated the CBD Tolling Alternative's effects on regional air pollutants and at local intersections and highway segments using screening-level analyses and detailed air quality modeling, as appropriate. Using BPM results for the adopted toll structure, the Project Sponsors applied the same methodology for the reevaluation of air quality.

Mesoscale Analysis

Collectively, the adopted toll structure reduces emissions in the 12-county study area for criteria pollutants, MSATs, and GHGs by the same or more than the amounts identified in the Final EA with Tolling Scenario A.

At a county level, some pollutants have slight increases with the adopted toll structure relative to Tolling Scenario A. As shown in **Table 10.3** (criteria pollutants) and **Table 10.4** (MSATs), there are fewer predicted increases under the adopted toll structure than under Tolling Scenario A. All of the changes between the adopted toll structure and Tolling Scenario A by county are small.

Mesoscale Analysis by County – Criteria Pollutants

The adopted toll structure shows some higher increases of nitrogen oxides in Queens and Bronx Counties, of 0.67 percent and 1.48 percent, respectively, compared to a decrease of 0.56 percent in Queens County and 0.09 percent increase in Bronx County with Tolling Scenario A. However, these increases are small. Under the adopted toll structure, Nassau County shows a reduction, whereas under Tolling Scenario A, all the criteria pollutants would increase.

The greatest increases in criteria pollutants for the adopted toll structure are in Richmond County, ranging from 0.94 percent to 2.70 percent, and Bergen County, ranging from 0.45 percent to 1.11 percent. The overall increase of pollutants in these counties is small and the difference between Tolling Scenario A and the adopted toll structure is even smaller, less than 1 percent.

Mesoscale Analysis by County – MSATs

In comparing the adopted toll structure to the results in the Final EA/FONSI, in both the Final EA and for the adopted toll structure, six counties are identified with pollutant increases for at least one pollutant. With Tolling Scenario A, Richmond and Bergen Counties have the highest increase in pollutants. In the Final EA, increases of pollutants in Richmond County with Tolling Scenario A range from 1.01 percent to 1.99 percent and in Bergen County the increases range 0.40 percent to 0.82 percent.

In the adopted toll structure, increases of pollutants in Richmond County range from 1.09 percent to 2.39 percent. In Bergen County, the increases range from 0.90 percent to 1.04 percent. The increase in pollutants is considered small. Nassau and Putnam Counties show all reductions under the adopted toll structure, versus increases with Tolling Scenario A.

The Final EA analysis for Bronx County shows slight increases in all MSATs (.05 percent to 0.20 percent). The adopted toll structure for Bronx County shows some decreases (benzene and ethylbenzene) and higher increases for other pollutants, ranging from 0.33 percent to 1.22 percent. The overall increase of pollutants in the adopted toll structure is small. There are more reductions predicted for the adopted toll structure than for Tolling Scenario A in the Final EA/FONSI.

Microscale Analysis

Screening was performed to determine whether detailed microscale modeling for CO, PM_{10}, and $PM_{2.5}$ was required. Using the criteria in NYSDOT's *The Environmental Manual (TEM)* all 102 local intersections passed the screening analysis.

Highway Link Analysis

Of the three locations analyzed, the truck volumes were below the levels evaluated in the Final EA/FONSI so they were not reevaluated here. The one location where the truck AADT was higher with the adopted toll structure was at the George Washington Bridge. The results shown in **Table 10.7** are below the NAAQS. Based on the screening analyses, it was determined that the Project is not a project of air quality concern as defined in 40 CFR 93.123(b)(1). Despite not being a project of air quality concern, consultation with the interagency consultation group (ICG) and community input resulted in particulate matter hot spot analyses. Though not required, the particulate matter hot spot analyses were conducted on highway segments at three locations which represented the worst-case conditions among the Final EA tolling scenarios and the adopted toll structure. These worst-case conditions represented the largest increases in truck traffic and highest AADT. Under the adopted toll structure, particulate-matter concentrations would still be below the NAAQS. Therefore, the findings in the Final EA/FONSI are still valid and no further analysis is required.

The analysis for the adopted toll structure demonstrates that there are no potential adverse effects related to air quality and the conclusions of the Final EA remain valid. No additional mitigation is needed and the Project Sponsors remain committed to the enhancement measures described in the Final EA and FONSI.

Table 10.8 - Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
				A	B	C	D	E	F	G					
10 – Air Quality	Increases or decreases in emissions related to truck traffic diversions	Cross Bronx Expressway at Macombs Road, Bronx, NY	Increase or decrease in Annual Average Daily Traffic (AADT)	3,901	3,996	2,056	1,766	3,757	2,188	3,255	No	**No mitigation needed.** No adverse effects **Enhancements** **1.** Refer to the overall enhancement on monitoring at the end of this table. **2.** TBTA will work with NYC DOHMH to expand the existing network of sensors to monitor priority locations and supplement a smaller number of real-time $PM_{2.5}$ monitors to provide insight into time-of-day patterns to determine whether the changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will select the additional monitoring locations in consideration of air quality analysis in the EA and input from environmental justice stakeholders. NYS Department of Environmental Conservation (NYSDEC) and other agencies conducting monitoring will also be consulted prior to finalizing the monitoring approach. The Project Sponsors will monitor air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, and separate from ongoing air quality monitoring and reporting, the Project Sponsors will assess the magnitude and variability of changes in air quality to determine whether more monitoring sites are necessary. Data collected throughout the monitoring program will be made available publicly as data becomes available and analysis is completed. Data from the real-time monitors will be available online continuously from the start of pre-implementation monitoring. **3.** MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus depots and along bus routes. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed an approach that actively incorporates these priorities in the deployment phasing process of the transition. Based on feedback received during the outreach conducted for the Project and concerns raised by members of environmental justice communities, TBTA coordinated with MTA NYCT, which is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in MTA's next major procurement of battery electric buses, which began in late 2022. This independent effort by MTA NYCT is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.	3,917	No	**No mitigation needed.** The Project Sponsors are maintaining their commitment to implement the enhancement measures identified in the Final EA and FONSI.
			Percent change in AADT compared to No Action Alternative	2%	2%	1%	1%	2%	1%	2%			2%		
			Increase or decrease in daily number of trucks	509	704	170	510	378	536	50			433		
			Percent change in daily number of trucks compared to No Action Alternative	2%	3%	1%	2%	1%	2%	0%			2%		
			Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		
		I-95, Bergen County, NJ	Increase or decrease in AADT	9,843	11,459	7,980	5,003	7,078	5,842	12,506	No		10,341	No	
			Percent change in AADT compared to No Action Alternative	4%	5%	3%	2%	3%	2%	5%			4%		
			Increase or decrease in daily number of trucks	801	955	729	631	696	637	-236			499		
			Percent change in daily number of trucks compared to No Action Alternative	2%	3%	2%	2%	2%	2%	-1%			1%		
			Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		

EA CHAPTER	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
				A	B	C	D	E	F	G					
10 – Air Quality (Cont'd)	ncreases or decreases in emissions related to truck traffic diversions (Con'td)	RFK Bridge, NY	Increase or decrease in AADT	18,742	19,440	19,860	19,932	20,465	20,391	21,006	No	(See above)	20,273	No	**No mitigation needed.** The Project Sponsors are maintaining their commitment to implement the enhancement measures identified in the Final EA and FONSI.
			Percent change in AADT compared to No Action Alternative	13%	14%	14%	14%	15%	15%	15%			14%		
			Increase or decrease in daily number of trucks	2,257	2,423	2,820	3,479	4,116	3,045	432			2,433		
			Percent change in daily number of trucks compared to No Action Alternative	15%	16%	18%	22%	27%	20%	3%			16%		
			Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No			No		

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

11 Energy

Chapter 11 of the Final EA evaluated the effects of the CBD Tolling Alternative on energy use during operation and construction. This section evaluates the effects of the adopted toll structure on energy demand.

METHODOLOGY

Final EA Methodology

The Final EA evaluated the potential effects of the Project on the following elements:

- **Roadway energy:** Analyzed using the same methodology, assumptions and model as the regional air quality analysis documented in Chapter 10 of the Final EA (Tolling Scenario A, for the 12-county study area, using the USEPA's then-current emissions model, MOVES2014b). The analysis evaluated Tolling Scenario A because that scenario was predicted to have the smallest reduction in VMT. Using that scenario presents the smallest regional energy benefit; other tolling scenarios would have a larger benefit.
- **Server and systems energy:** Energy required to power monitoring and tolling equipment, including network detection systems, and servers that process the data collected by the network detection systems.
- **Construction energy:** Calculated based on the construction cost, using the NYSDOT construction cost calculation procedures to quantify energy use.

Reevaluation Methodology

- **Roadway energy:** Consistent with the approach for the Final EA, the energy analysis for the reevaluation used the same methodology, assumptions, and model that were used for the reevaluation of air quality. The reevaluation of air quality for the adopted toll structure was of the 12-county study area, using USEPA's current emissions model (MOVES3.1). (See the section on air quality for further information about the models used for the reevaluation.)
- **Server, systems and construction energy:** There are no changes to the power requirements or construction costs of the Project with the adopted toll structure and therefore no further analysis needed.

ANALYSIS AND RESULTS

Similar to Final EA Tolling Scenario A, the adopted toll structure would result in a 0.4 percent reduction in VMT in the 12-county study area (compared to a 0.3 percent reduction in Final EA Tolling Scenario A) and

a reduction in energy use in the region as compared to the No Action Alternative (see Table 11.1). Based on this analysis, the conclusions in the Final EA for both 2023 and 2045 remain valid.

Table 11.1. Percent Change in Energy Demand Vs. No Action Alternative (2023), Final EA and Adopted Toll Structure

FINAL EA ANALYSIS (TOLLING SCENARIO A)	ADOPTED TOLL STRUCTURE
-0.6%	-0.6%

Table 11.2 presents information from the Final EA Table ES-5 summarizing the conclusions related to regional energy use, now modified to include the adopted toll structure.

FINDINGS

The reevaluation used BPM output related to VMT and vehicle speeds to calculate the effects of the adopted toll structure on energy use. It also used information on construction cost to calculate energy use related to construction activities for the Project. The analysis concluded that, consistent with the conclusions of the Final EA, the adopted toll structure would also result in a reduction in VMT in the 12-county study area and would also therefore reduce energy use as compared to the No Action Alternative. The adopted toll structure would not change the construction activities for the Project from those analyzed in the Final EA. Overall, the conclusions of the Final EA related to energy use remain valid.

Table 11.2. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
11 – Energy		Reductions in regional energy consumption	12-county study area	Narrative	Reductions in regional VMT would reduce energy consumption							No	**No mitigation needed.** Beneficial effects	Same as Final EA	No	**No mitigation needed.** Beneficial effects

12 Noise

Chapter 12 of the Final EA presented an evaluation of the potential changes in traffic noise exposure that would result from projected changes in traffic volumes with the implementation of the CBD Tolling Alternative. This section evaluates the effects of the adopted toll structure on noise levels. Additional information is provided in Appendix 12.

METHODOLOGY

Final EA Methodology

The methodology used to determine potential noise effects is described starting on page 12-1 of the Final EA, Section 12.1.2, "Methodology." In summary, the Final EA analysis methodology included the following:

1. For consideration of traffic-related noise near bridge and tunnel crossings into the Manhattan CBD, used BPM results related to traffic volumes for the tolling scenario with the highest predicted traffic volumes, Tolling Scenario D, which was the tolling scenario analyzed in the Final EA's traffic assessment (Subchapter 4B). Tolling Scenario D was the representative worst-case tolling scenario in terms of traffic volumes. As the noise analysis is based on traffic, this tolling scenario was used as the representative worst-case scenario for the noise analysis.
2. For evaluation of traffic-related noise at local intersections, used the same study areas and traffic volumes analyzed for traffic in the Final EA (Subchapter 4B) for all 102 local traffic intersections within 15 study areas. As with the traffic analysis, this assessment considered Tolling Scenario D at all locations, except in Downtown Brooklyn, where Tolling Scenario C was evaluated because it had higher traffic volumes there than the other tolling scenarios (this is consistent with the approach used for the traffic analysis).
3. Calculated incremental changes in noise levels for traffic volumes, using Passenger Car Equivalents (PCEs) (using PCEs, 1 auto = 1 PCE; 1 medium truck = 13 PCEs; 1 bus = 18 PCEs; 1 heavy truck = 47 PCEs) for each study area. As with the traffic analysis, the noise analysis used Tolling Scenario D at all locations except Downtown Brooklyn, for which it used Tolling Scenario C.
    - For bridge and tunnel crossings, calculated 24-hour change in weighted noise levels (dB(A))[6].
    - For local intersections, calculated peak-period and late-night changes in dB(A).
4. For locations where predicted incremental noise levels were greater than 3.0 dB(A), which is the minimum level of potential perceptibility for most humans (see Final EA Chapter 12, Section 12.1.2.1), further analysis would be conducted using FHWA's Traffic Noise Model (TNM) to

[6] As described in the Final EA, Chapter 12, sound is typically measured in units of decibels (dB). The human hearing range is more sensitive to midrange frequencies compared to either low or very high frequencies. This characteristic of the human ear is accounted for by adjusting or weighting the spectrum of the measured sound level for the sensitivity of the human hearing range, referred to as the A-weighted scale, and is denoted by the dB(A) notation.

determine if the increases would be adverse. (No locations had predicted increases above 3.0 dB(A), so no further analysis was necessary.)

Reevaluation Methodology

1. For the same study areas as the Final EA, used the traffic volumes developed for the reevaluation of traffic conditions.
2. Where traffic volumes were higher for the adopted toll structure than evaluated in the Final EA, calculated incremental changes in noise levels for traffic volumes, using same approach as in Final EA.
3. As in the Final EA, for any locations with predicted incremental noise increases greater than 3.0 dB(A), further analysis would be conducted to determine if the increases would be adverse. (As described below, no locations had predicted levels above this level so no further analysis was necessary.)

ANALYSIS AND RESULTS

The reevaluation concluded that, similar to the Final EA, the adopted toll structure would not result in perceptible noise level increases at bridge and tunnel crossings or local intersections because the noise increase would not exceed the perceptible level of 3.0 dB(A). All projected noise level increases in the Final EA and with the adopted toll structure would be below the 3.0 dB(A) perceptibility level.

- **Bridge and Tunnel Crossings:** The predicted noise level increases with the adopted toll structure are all 0.5 dB(A) or less, less than the increases predicted in the Final EA. Where increases are predicted compared to the No Action Alternative, in most cases they are lower than, or equal to, those studied in the Final EA. As shown by comparison the results for the Final EA Tolling Scenarios C and Do to the results for the adopted toll structure in **Table 12.1** below, the adopted toll structure would result in greater increases than Tolling Scenarios C and D at five locations during certain times of the day. At these locations and these analysis hours, the increase over the No Action Alternative would be very small, ranging from 0.1 dB(A) to 0.5 dB(A). At all other locations and in all other time periods, the adopted toll structure would result in smaller changes in noise levels than the tolling scenarios evaluated in the Final EA.

  The location where the highest noise level increase would occur would shift with the adopted toll structure. With the tolling scenarios evaluated in the Final EA, which were the tolling scenarios predicted to result in the highest traffic volumes in each study area, the highest noise-level increase would occur at the Queens-Midtown Tunnel, with an increase of 2.9 dB(A) during a five -hour periods. With the adopted toll structure, the highest predicted noise-level increase would occur at the Robert F. Kennedy (RFK) Bridge in Manhattan, with an increase of 0.5 dB(A) for an 11-hour period. With both the adopted toll structure and the Final EA tolling scenarios, the maximum noise-level increases would remain below the 3.0 dB(A) level of perceptibility. **Table 12.1** presents the results of the noise analysis for bridge and tunnel crossings for the Final EA and the adopted toll structure. Additional information is provided in **Appendix 12**. Overall, the increase in noise levels due to the adopted toll structure is less for the 16 locations evaluated in the Final EA.

Table 12.1 - Modified Final EA Table 12-4. Projected Noise-Level Changes (in dB(A)) for CBD Tolling Alternative at Bridge and Tunnel Crossings - Tolling Scenarios D and C – with the Adopted Toll Structure Below

Final EA Tolling Scenarios C and D

TIME	ED KOCH QUEENSBORO BRIDGE	QUEENS-MIDTOWN TUNNEL (SITE R1)	HUGH L. CAREY TUNNEL (SITE R2)	HOLLAND TUNNEL	LINCOLN TUNNEL	RFK BRIDGE – BRONX	RFK BRIDGE – MANHATTAN	RFK BRIDGE – QUEENS	WILLIAMSBURG BRIDGE	MANHATTAN BRIDGE	BROOKLYN BRIDGE	GEORGE WASHINGTON + HENRY HUDSON BRIDGES	HENRY HUDSON BRIDGE	VERRAZZANO-NARROWS BRIDGE	60TH STREET CROSSINGS	GEORGE WASHINGTON BRIDGE
12 AM	-1.9	**2.9**	1.8	-0.6	-0.3	0.0	0.5	0.0	-2.4	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
1 AM	-1.9	**2.9**	1.8	-0.7	-0.4	0.0	0.5	0.0	-2.4	-1.7	-0.3	0.0	-0.1	0.2	-0.6	**0.1**
2 AM	-1.9	**2.9**	**1.9**	-0.7	-0.2	0.0	0.5	0.0	-2.6	-1.7	-0.3	0.0	-0.1	**0.3**	-0.6	**0.1**
3 AM	-1.7	**2.9**	1.8	-0.6	-0.1	0.0	0.4	0.0	-2.9	-1.6	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
4 AM	-1.6	**2.9**	1.8	-0.6	0.0	0.0	0.4	0.0	-3.2	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
5 AM	-1.5	2.7	1.8	-0.4	0.2	0.0	0.3	0.0	-3.3	-1.8	-0.5	0.0	-0.1	0.1	-0.6	**0.1**
6 AM	0.0	0.4	1.1	-0.3	-0.2	0.0	0.2	0.0	-0.3	-0.6	-0.2	0.0	0.0	0.0	-0.2	0.0
7 AM	0.0	0.1	0.6	-0.3	-0.2	0.0	0.2	0.0	-0.1	-0.6	-0.2	0.0	0.0	0.1	-0.2	0.0
8 AM	0.0	0.1	0.7	-0.3	-0.2	0.0	0.3	0.0	-0.1	-0.6	-0.1	0.0	0.0	0.1	-0.2	0.0
9 AM	0.0	0.1	1.0	-0.3	-0.2	0.0	0.3	0.0	-0.2	-0.6	-0.1	0.0	0.0	0.1	-0.2	0.0
10 AM	-0.4	0.4	1.1	-0.5	-0.4	0.0	0.3	0.0	-0.7	-1.8	-0.1	0.0	-0.1	0.2	-0.6	**0.1**
11 AM	-0.5	0.5	1.5	-0.5	-0.5	0.0	0.3	0.0	-1.0	-1.8	-0.2	0.0	-0.1	**0.3**	-0.6	**0.1**
12 PM	-0.8	0.7	1.7	-0.6	-0.5	0.0	0.3	0.0	-1.0	-1.7	-0.2	0.0	-0.1	**0.3**	-0.6	**0.1**
1 PM	-0.7	0.4	1.7	-0.6	-0.6	0.0	0.3	0.0	-0.9	-1.7	-0.3	0.0	-0.1	0.2	-0.6	**0.1**
2 PM	-0.7	0.3	1.1	-0.6	-0.6	0.0	0.4	0.0	-0.7	-1.6	-0.3	0.0	-0.1	0.2	-0.6	**0.1**
3 PM	-0.7	0.3	0.7	-0.5	-0.7	0.0	0.4	0.0	-0.5	-1.4	-0.3	0.0	-0.1	0.2	-0.6	**0.1**
4 PM	-0.9	0.7	0.7	-0.3	-0.6	0.0	0.3	0.0	-0.8	-0.4	-0.1	0.0	0.0	0.1	-0.2	0.0
5 PM	-1.0	0.6	0.7	-0.3	-0.6	0.0	0.3	0.0	-0.8	-0.5	-0.1	0.0	0.0	0.1	-0.2	0.0
6 PM	-0.7	0.6	0.8	-0.4	-0.6	0.0	0.3	0.0	-1.0	-0.5	-0.1	0.0	0.0	0.1	-0.2	0.0
7 PM	-0.8	0.8	1.1	-0.4	-0.6	0.0	0.3	0.0	-1.2	-0.5	-0.1	0.0	0.0	0.1	-0.2	0.0
8 PM	-1.5	1.2	1.4	-0.6	-0.3	0.0	**0.6**	0.0	-1.5	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
9 PM	-1.6	1.7	1.8	-0.6	-0.3	0.0	0.5	0.0	-2.0	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
10 PM	-1.5	2.2	1.8	-0.6	-0.3	0.0	0.5	0.0	-2.2	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**
11 PM	-1.8	2.8	1.8	-0.7	-0.2	0.0	0.5	0.0	-2.6	-1.7	-0.4	0.0	-0.1	0.2	-0.6	**0.1**

Note: Values shown in **bold** indicate the greatest increase for the location.

Adopted Toll Structure

TIME	ED KOCH QUEENSBORO BRIDGE	QUEENS-MIDTOWN TUNNEL (SITE R1)	HUGH L. CAREY TUNNEL (SITE R2)	HOLLAND TUNNEL	LINCOLN TUNNEL	RFK BRIDGE – BRONX	RFK BRIDGE – MANHATTAN	RFK BRIDGE – QUEENS	WILLIAMSBURG BRIDGE	MANHATTAN BRIDGE	BROOKLYN BRIDGE	GEORGE WASHINGTON + HENRY HUDSON BRIDGES	HENRY HUDSON BRIDGE	VERRAZZANO-NARROWS BRIDGE	60TH STREET CROSSINGS	GEORGE WASHINGTON BRIDGE
12 AM	0.0	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	0.0	0.0	-0.6	**0.3**	0.0	0.3
1 AM	0.0	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	**0.1**	0.0	-0.6	**0.3**	0.0	0.3
2 AM	0.0	0.2	0.1	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	0.0	0.0	-0.6	**0.3**	0.0	**0.4**
3 AM	0.2	0.2	0.2	-0.7	-1.1	0.0	0.4	0.0	-0.9	-1.2	0.0	0.0	-0.7	**0.3**	0.0	**0.4**
4 AM	0.3	0.2	0.2	-0.7	-1.1	0.0	0.4	0.0	-0.9	-1.2	-0.1	0.0	-0.9	**0.3**	0.0	**0.4**
5 AM	**0.4**	**0.4**	0.4	-0.6	-1.2	0.0	0.3	0.0	-1.0	-1.3	-0.1	0.0	-1.1	**0.3**	0.0	0.4
6 AM	-1.9	0.2	0.4	-0.4	-0.4	0.0	0.2	0.0	-0.3	-0.8	-0.1	0.0	0.0	0.2	0.0	0.0
7 AM	-1.9	0.2	0.3	-0.5	-0.4	0.0	0.2	0.0	-0.3	-0.7	-0.1	0.0	0.0	0.2	0.0	0.0
8 AM	-1.9	0.2	0.3	-0.5	-0.4	0.0	0.2	0.0	-0.3	-0.7	-0.1	0.0	0.0	0.2	0.0	0.0
9 AM	-1.9	0.1	**0.5**	-0.4	-0.4	0.0	0.2	0.0	-0.3	-0.8	-0.1	0.0	0.0	0.2	0.0	0.0
10 AM	-0.5	-0.1	0.2	-0.7	-0.9	0.0	0.2	0.0	-0.7	-1.2	-0.2	0.0	-0.2	0.2	0.0	0.2
11 AM	-0.5	-0.1	0.2	-0.8	-0.9	0.0	0.2	0.0	-0.8	-1.2	-0.3	0.0	-0.2	0.2	0.0	0.2
12 PM	-0.6	-0.1	0.2	-0.8	-0.9	0.0	0.2	0.0	-0.8	-1.3	-0.2	0.0	-0.2	0.2	0.0	0.3
1 PM	-0.6	-0.1	0.2	-0.8	-0.9	0.0	0.2	0.0	-0.8	-1.3	-0.2	0.0	-0.2	0.2	0.0	0.3
2 PM	-0.6	-0.1	0.2	-0.8	-0.9	0.0	0.2	0.0	-0.8	-1.3	-0.2	0.0	-0.2	0.2	0.0	0.3
3 PM	-0.6	-0.2	0.2	-0.7	-0.9	0.0	0.3	0.0	-0.8	-1.3	-0.2	0.0	-0.2	0.2	0.0	0.3
4 PM	-0.7	-0.1	0.0	-0.4	-0.6	0.0	**0.5**	0.0	-0.5	-1.2	-0.4	0.0	0.0	0.1	0.0	0.1
5 PM	-0.6	-0.1	0.0	-0.4	-0.6	0.0	**0.5**	0.0	-0.5	-1.3	-0.4	0.0	0.0	0.1	0.0	0.1
6 PM	-0.9	0.0	0.0	-0.5	-0.6	0.0	**0.5**	0.0	-0.6	-1.3	-0.4	0.0	0.0	0.1	0.0	0.1
7 PM	-0.9	0.2	0.0	-0.5	-0.6	0.0	**0.5**	0.0	-0.6	-1.3	-0.4	0.0	0.0	0.1	0.0	0.1
8 PM	0.1	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	0.0	0.0	-0.7	**0.3**	0.0	0.3
9 PM	0.1	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	0.0	0.0	-0.7	**0.3**	0.0	0.3
10 PM	0.1	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.3	0.0	0.0	-0.6	**0.3**	0.0	0.3
11 PM	0.0	0.2	0.2	-0.7	-1.0	0.0	**0.5**	0.0	-0.9	-1.2	-0.1	0.0	-0.6	**0.3**	0.0	0.3

Notes: Values shown in **bold** indicate the greatest increase for the location. Yellow shading indicates an increase from the No Action that is greater than that from the Final EA Tolling Scenarios C and D.
See Final EA Table 12-4 on page 12-9 for values with the CBD Tolling Alternative, Tolling Scenarios C and D.

- **Local Streets:** The location where the highest noise-level increase would occur at traffic intersections would also shift with the adopted toll structure. In the Final EA, this would occur during the midday in Lower Manhattan adjacent to Trinity Place and Edgar Street, with a maximum increase of 2.5 dB(A). With the adopted toll structure, the highest increase would occur near the intersection of West 179th Street and Broadway during the AM and midday periods, where a maximum increase of 2.8 dB(A) is projected (see **Table 12.2**). The results for all intersections evaluated are summarized in **Appendix 12**. Overall, with both the adopted toll structure and the Final EA tolling scenarios, the maximum noise-level increases would remain below the 3 dB(A) level of perceptibility resulting in no adverse effect.

  The directional-weighted PCE noise levels were used in the reevaluation assessment to better align the PCE methodology with how the FHWA TNM model would estimate total traffic noise exposure from the same roadway segment.

  For example, in **Table 12.2**, in the TNM, the noise exposure at a receptor on the sidewalk along westbound West 179th Street would be the sum of the sound energy of westbound left (WBL), westbound through (WBT), and westbound right (WBR). The directional weighting method is a bridge to make the PCE methodology more aligned with the TNM's more detailed method of estimating total noise exposure from the same roadway link, which in **Table 12.2** is divided into separate movements for the same traffic link movement (westbound West 179th Street). At a nearby receptor on West 179th Street, noise levels would be the sum of the sound energy associated with all the traffic moving in the same direction on West 179th Street.

Table 12.2 - Estimated Directional Weighted (DW) PCE Noise Level Changes for Adopted Toll Structure, Little Dominican Republic Study Area, West 179th Street at Broadway

APPROACH	MOVEMENT	LANE GROUP	MOVEMENT	AM		MIDDAY		PM	
				PCE	DW PCE	PCE	DW PCE	PCE	DW PCE
NB	NBL	L	Left	3.0	2.7	2.5	2.8	1.3	2.5
	NBT	T	Through	2.6		2.9		3.1	
SB	SBT	T	Through	3.0	2.8	1.9	1.6	1.6	0.9
	SBR	TR	R	2.2		1.1		-0.8	
WB	WBL	TR	Left	3.1	-0.1	1.9	-2.2	2.4	-2.8
	WBT		Through	-1.1		-3.3		-4.0	
	WBR		Right	4.0		2.5		1.9	

Notes: NB = northbound; SB = southbound; WB = westbound; NBL = northbound left turn; NBT = northbound through; SBT = southbound through; SBR = southbound right turn; WBL = westbound left turn; WBT = westbound through; WBR = westbound right turn; L = left turn; T = through; R = right turn; TR = through/right turn

Table 12.3 presents information from the Final EA Table ES-5 summarizing the conclusions related to traffic-related noise on bridge and tunnel approaches and at local intersections, now modified to include the adopted toll structure.

FINDINGS

For the reevaluation, the Project Sponsors used information related to traffic volumes from the BPM to evaluate the adopted toll structure's potential effects on noise levels near bridge and tunnel crossings into the Manhattan CBD and at local intersections where traffic volumes are predicted to increase. The reevaluation used the same methodology as the noise analysis in the Final EA. The analysis demonstrates that the conclusions of the Final EA related to noise remain valid. Projected noise level increases would remain below 3.0 dB(A), as described in the Final EA. Thus, the adopted toll structure would not result in potential adverse effects on ambient noise levels and no mitigation is needed.

Table 12.3 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
12 – Noise		Imperceptible increases or decreases in noise levels resulting from changes in traffic volumes	Bridge and tunnel crossings	Narrative	The maximum noise level increases (2.9 dB(A)), which were predicted adjacent to the Queens-Midtown Tunnel in Tolling Scenario D, would not be perceptible.							No	**No mitigation needed**. No adverse effects **Enhancement** Refer to the overall enhancement on monitoring at the end of this table.	The maximum predicted noise level increase (0.5 dB(A)), at RFK Bridge in Manhattan, would not be perceptible.	No	**No mitigation needed**. No adverse effects. The Project Sponsors are maintaining their commitment to mplement the enhancement measures identified in the Final EA and FONSI.
			Local streets	Narrative	Tolling Scenario C was used to assess noise level changes in Downtown Brooklyn, Tolling Scenario D was used at all other locations assessed. The maximum predicted noise level increases (2.5 dB(A)), which were at Trinity Place and Edgar Street, would not be perceptible. There was no predicted increase in noise levels in the Downtown Brooklyn locations.							No		The maximum predicted noise level increases (2.8 dB(A)), at W. 179th St / Broadway, would not be perceptible.	No	

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

Other Analyses: Natural Resources (EA Chapter 13), Hazardous Wastes (EA Chapter 14), Construction Effects (EA Chapter 15)

Chapters 13, 14, and 15 of the Final EA explored the effects on three analysis areas—natural resources, hazardous wastes, and construction effects, respectively—from the installation of the tolling infrastructure and tolling system equipment that will be used for the CBD Tolling Program. The adopted toll structure will use the same tolling infrastructure and tolling system equipment described and evaluated in the Final EA. Construction for the Project began in July 2023. The construction of tolling infrastructure and tolling system equipment is now complete. Power and communications are nearing completion and testing is under way. With the same infrastructure and equipment and construction activities as evaluated in the Final EA, the Final EA remains valid for these analysis areas and no further analysis is needed.

Tables 13.1, 14.1, and 15.1 present information from the Final EA Table ES-5 summarizing the conclusions related to these topics, now modified to include the adopted toll structure.

FINDINGS

The Final EA considered the effects from installation of tolling infrastructure and tolling system equipment related to natural resources, hazardous wastes, and construction effects. The adopted toll structure would have the same construction activities and the same permanent tolling infrastructure and tolling system equipment described and evaluated in the Final EA. Consequently, for these areas, the conclusions of the Final EA remain valid, and no additional construction commitments are needed. The Project Sponsors will implement the mitigation commitments described in the Final EA.

Table 13.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
13 – Natural Resources		Construction activities to install tolling infrastructure near natural resources	Sites of tolling infrastructure and tolling system equipment	Narrative	No effects on surface waters, wetlands, or floodplains. Potential effects on stormwater and ecological resources will be managed through construction commitments. The Project is consistent with coastal zone policies.							No	Refer to **Chapter 13, "Natural Resources,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.

Table 14.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
14 – Hazardous Waste		Potential for disturbance of existing contaminated or hazardous materials during construction	Sites of tolling infrastructure and tolling system equipment	Narrative	Soil disturbance during construction and the potential alteration, removal, or disturbance of existing roadway infrastructure and utilities that could contain asbestos-containing materials, lead-based paint, or other hazardous substances. Potential effects will be managed through construction commitments.							No	Refer to **Chapter 14, "Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.

Table 15.1. Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
15 – Construction Effects		Potential disruption related to construction for installation of tolling infrastructure	Sites of tolling infrastructure and tolling system equipment	Narrative	Temporary disruptions to traffic and pedestrian patterns, and noise from construction activities, with a duration of less than one year overall, and approximately two weeks at any given location. These effects will be managed through construction commitments.							No	Refer to **Chapter 15, "Construction Effects,"** for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	Same as Final EA. No change proposed to construction for new tolling infrastructure, tolling system equipment, or signage.	No	The Project Sponsors will implement the construction commitments described in the Final EA.

16 Summary of Effects

Chapter 16 of the Final EA provides a summary of the direct, indirect, and cumulative effects of the CBD Tolling Alternative as discussed in the previous chapters of the Final EA. The reevaluation of the adopted toll structure presented in other sections of this document demonstrates that, with the adopted toll structure, the conclusions in the Final EA remain valid and there is no need for additional mitigation. Consequently, the summary of direct, indirect, and cumulative effects also remains valid.

Table 1.1 in Section 1 of this reevaluation provides a summary of the effects of the adopted toll structure in comparison to the effects presented in the Final EA. The table is a re-creation of the table that was provided in the Final EA as Table ES-5 and Table 16-1, now modified to include the adopted toll structure.

17 Environmental Justice

Chapter 17 of the Final EA presented an evaluation of the CBD Tolling Alternative's potential for disproportionately high and adverse effects to environmental justice populations, including effects on local communities and effects related to regional mobility. This section presents a reevaluation of that topic for the adopted toll structure.

METHODOLOGY

Final EA Methodology

The methodology used to determine potential effects on environmental justice populations is described starting on page 17-2 of the Final EA, Section 17.3, "Methodology." As described in that section, the environmental justice analysis evaluated two types of effects of the CBD Tolling Program:

- **Local (Neighborhood) Effects:** The Final EA evaluated the effects on neighborhoods related to changes in traffic patterns and the resulting effects in terms of traffic congestion, air emissions, and noise; it then assessed whether any such effects would occur disproportionately to environmental justice populations. This included analysis for the Final EA of increases or decreases in traffic and truck traffic as a result of traffic diversions in communities already highly burdened by pre-existing air pollution and chronic diseases. For the local (neighborhood) effects, the Final EA used a 10-county study area where localized effects (such as changes in traffic volumes, air emissions, or noise) would occur as a result of the Project.
- **Regional Effects:** The Final EA considered how implementation of the CBD Tolling Alternative would affect the regional population in terms of increased costs (tolls), changes in trip time, and changes in transit conditions, and whether any effects would occur disproportionately to environmental justice populations. For regional effects, the Final EA evaluated the 28-county regional study area, which is the main catchment area for trips to and from the Manhattan CBD and the area where changes in travel patterns and mobility would occur.

Reevaluation Methodology

The reevaluation used the same methodology as the Final EA in considering the local (neighborhood) effects and regional effects of the adopted toll structure.

ANALYSIS AND RESULTS: LOCAL (NEIGHBORHOOD) EFFECTS

The Final EA considered a range of issues that had the potential to result in local, neighborhood effects:

- Increased traffic congestion on highway segments
- Changes in traffic conditions at local intersections

- Traffic-related effects on noise
- Increases to transit ridership
- Changes in passenger flows at transit stations
- Changes in pedestrian circulation near transit hubs
- Potential for indirect displacement
- Potential effects on the costs of goods
- Traffic-related effects on air quality (including a supplemental analysis for the Final EA of Project effects of traffic and truck traffic on communities with associated high pre-existing air pollutant and health burdens)

The Final EA concluded that, with the implementation of mitigation, the CBD Tolling Alternative would not result in disproportionately high and adverse effects on environmental justice populations in those topic areas.

ANALYSIS AND RESULTS: REGIONAL

Low-Income Drivers

As documented in the Final EA, a total of 16,100 low-income workers drive to the Manhattan CBD for work, based on Census Transportation Planning Program (CTPP) data. The EA published in August 2022 concluded that the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers who currently drive to the Manhattan CBD and do not have reasonable alternative transportation modes available, because the cost of the toll would consume a larger percentage of their available income. To avoid that potential disproportionate adverse effect, in the Final EA, the Project Sponsors committed to a program of mitigation measures for low-income frequent drivers. With further analysis of the population affected (as documented in Appendix 17E, "Approach to Mitigating the Effect of CBD Tolls on Low-Income Frequent Drivers"), and the addition of mitigation measures committed to by the Project Sponsors (see **Table 17.1** below), the Final EA concluded there would not be a disproportionately high and adverse effect on low-income drivers.

As shown in **Table 17.1**, the adopted toll structure includes passenger toll rates within the range evaluated in the Final EA and enhances the mitigation commitments by offering a 50 percent discount off the peak hour toll after 10 trips per month for low-income drivers, giving a deeper discount than that committed to in the Final EA.[7] Therefore, the conclusions of the Final EA remain valid for low-income drivers.

[7] In the Final EA, the Project Sponsors committed $47.5 million over 5 years for Low-Income Discount Plan for low-income frequent drivers; with the adopted toll structure, the Project Sponsors will commit $82 million over 5 years to the deeper discount.

Table 17.1 - Mitigation Commitments for Low-Income Drivers in Final EA and Adopted Toll Structure

FINAL EA	ADOPTED TOLL STRUCTURE
Toll Rates Evaluated	
Auto toll rates evaluated: $9 - $23 peak; $7 - $17 off-peak; $5 - $12 overnight	Auto toll rates within the range of the Final EA: $15 peak; $3.75 overnight
Mitigation Commitments	
Tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than $60,000.	Commitment remains, not specific to the adopted toll structure
Information related to the tax credit to be posted on the Project website, with a link to the appropriate location on the NYS DTF website.	Commitment remains, not specific to the adopted toll structure
Elimination of the $10 E-ZPass tag deposit fee for customers without credit card backup.	Commitment remains, not specific to the adopted toll structure
Enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-load balance), refill their accounts with cash at participating retail locations, and discount plans already in place.	Commitment remains, not specific to the adopted toll structure
Outreach and education on eligibility for existing discounted transit fare products and programs.	Commitment remains, not specific to the adopted toll structure
Establishment of an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting prior to Project implementation, to share updated data and analysis and listen to potential concerns.	Commitment remains, not specific to the adopted toll structure
An overnight toll rate that is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD tolling structure, which will benefit low-income drivers traveling during this time. In the Final EA, a total of $30 million was allocated over 5 years for this discounted overnight toll.	The adopted toll structure includes an overnight toll discounted further than the mitigation commitment: 9 PM – 5 AM weekdays, 9 PM – 9 AM weekends 25% of peak toll rate, overnight EZP rates as follows: Auto - $3.75 Small truck - $6.00 Large truck - $9.00 A total of $123 million will be allocated over 5 years for this discounted overnight toll.
For the first five years of the Project, the final tolling structure to include a discounted toll rate for low-income frequent drivers who have either a Federal adjusted gross income reported on their income tax return for the prior calendar year in the amount of no more than $50,000 or proof of enrollment in a qualifying government-provided income-based program: ▪ A 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted). ▪ Results in a discounted base auto toll rate of $7 - $17, depending on the tolling scenario. ▪ In the Final EA, a total $47.5 million was allocated for this discount over 5 years	Low-Income Discount Plan included as part of the adopted toll structure, but discounted further than the mitigation commitment: ▪ A 50 percent discount on the peak toll rate after the first 10 trips each month. ▪ Results in a discounted base auto toll rate of $7.50. ▪ A total of $82 million will be allocated over 5 years for this increased discount.

Minority Drivers

The Final EA determined that for minority drivers who have no reasonable alternative mode for reaching the Manhattan CBD other than private vehicle, the cost of the new CBD toll would have the same effect as experienced by the general population and no disproportionately high and adverse effect would occur.

The Final EA also included a separate analysis of the Project's effect on taxi and FHV drivers, discussed below.

Minority Taxi and FHV Drivers

The EA published in August 2022 concluded that taxi and FHV drivers would be adversely affected by the cost of the toll if tolled more than once per day, because the reduction of VMT for taxi and FHVs with paying customers in Manhattan, and particularly in the CBD, would lead to income loss and losses in employment, given that the income of taxi and FHV drivers is directly related to the miles they travel with paying customers. Based on available data from the TLC, 96 percent of taxi drivers and 91 percent of FHV drivers were born in countries other than the United States and more than half from countries that would be considered minority populations for this analysis. The Final EA/FONSI identified adverse effects to taxi and/or FHV drivers in New York City in tolling scenarios that charge their vehicles more than one passenger-vehicle toll per day.[8] The mitigation commitment was to adopt a toll structure with a toll of no more than once per day for taxi and FHV drivers. In the Final EA/FONSI, with the inclusion of this mitigation commitment, FHWA concluded that no disproportionately high and adverse effect would occur to taxi and FHV drivers.

With the adopted toll structure, taxi and FHVs would be tolled for each trip entering, leaving, and within the CBD made with passengers. The base toll for taxis (including yellow taxis, green cabs, and FHVs other than high-volume FHVs) would be $1.25 per trip with paying passengers for trips to, within, or from the Manhattan CBD; for high-volume FHVs,[9] the base toll would be $2.50 per trip with paying passengers for trips to, within, or from the Manhattan CBD. Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily auto peak rate in the adopted toll structure of $15. Based on a TLC analysis of trips made by TLC-licensed vehicles in May 2023, the average number of trips for taxis with passengers to/from/within the CBD is 12, and for FHVs it is 6. The adopted toll structure, based on the toll rate for taxis and FHVs and the average number of trips per day for those vehicles, is consistent with the Project Sponsors' commitment to toll taxis and FHVs no more than

8 As noted in the Final EA on page 17-23, based on data from the New York City Taxi and Limousine Commission about the countries of origin of taxi and FHV drivers in New York City, for purposes of this analysis, New York City taxi and FHV drivers are identified as a minority population.

9 The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to high-volume FHVs (i.e., Lyft and Uber).

once per day. The smaller per-trip charge ensures that the passenger is responsible for the cost of the toll and the drivers do not bear the burden of the cost.

As shown in Table 17.2, the adopted toll structure would limit the reduction in demand for taxis and FHVs in the Manhattan CBD relative to the No Action, resulting in only 0.3 percent reduction in taxi and FHV VMT (-904 VMT) within the Manhattan CBD. Comparing the adopted toll structure to the tolling scenarios evaluated in the Final EA that limited the toll on taxis and FHVs to once per day (Tolling Scenarios B, F, and Modified G) and did not result in an adverse effect on taxi and FHV drivers, the adopted toll structure would reduce taxi and FHV VMT in New York City by 1.6 percent, which falls between the 1 to 1.7 percent decrease with those Final EA tolling scenarios. Within the 28-county study area (including the CBD), the adopted toll structure would reduce taxi and FHV VMT by 0.7 percent, which is more than Modified Tolling Scenario G, with a 0.5 percent reduction, and less than Tolling Scenario F, with a 1.0 percent reduction—again falling within the range of scenarios that did not have an adverse effect on taxi and FHV drivers in the Final EA/FONSI. With the adopted toll structure, the slight reduction in VMT for taxis and FHVs in the Manhattan CBD would maintain income for taxi and FHV drivers close to existing levels without increasing VMT within the CBD. Increased VMT would add to the congestion in the CBD, in contrast to the purpose and need of this Project.

Therefore, the adopted toll structure is consistent with the commitments in the Final EA related to taxi and FHV drivers. The conclusions of the Final EA remain valid.

Table 17.2 - Modified Final EA Table 17-14. Change in Taxi/For-Hire Daily Vehicle-Miles Traveled in New York City vs. No Action Alternative - with the Adopted Toll Structure Added

GEOGRAPHIC AREA	FINAL EA TOLLING SCENARIOS								ADOPTED TOLL STRUCTURE
	A	B	C	D	E	F	G	MODIFIED G	
Taxi Toll Policy	All Entries	Once per Day	Exempt	All Entries	Exempt	Once per Day	All Entries	Once per Day	$1.25 per trip toll on trips to, within, or from the CBD (see note)
High-Volume FHV Toll Policy			Up to 3 Times Daily		Up to 3 Times Daily				$2.50 per trip toll on trips to, within, or from the CBD (see note)
Peak Toll Rate	$9	$10	$14	$19	$23	$23	$12	$12	$15
Bronx County	-8,392 (-3.1%)	-5,717 (-2.1%)	-6,426 (-2.4%)	-9,346 (-3.4%)	-3,991 (-1.5%)	-1,959 (-0.7%)	-7,831 (-2.9%)	-1,621 (-0.6%)	+16 (+0.0%)
Kings County (Brooklyn)	-33,855 (-9.1%)	-20,648 (-5.5%)	-10,247 (-2.7%)	-37,923 (-10.2%)	-27,854 (-7.5%)	-7,095 (-1.9%)	-39,183 (-10.5%)	-22,971 (-6.2%)	-5,857 (-1.6%)
New York County (Manhattan)	-77,843 (-10.9%)	-19,553 (-2.7%)	-51,989 (-7.3%)	-119,349 (-16.7%)	-73,223 (-10.2%)	-17,076 (-2.4%)	-87,944 (-12.3%)	-27,897 (-3.9%)	-25.105 (-4.9%)
Inside Manhattan CBD	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)	+10,203 (+3.1%)	-904 (-0.3%)
Outside Manhattan CBD	-56,345 (-14.4%)	-34,573 (-8.8%)	-40,618 (-10.4%)	-64,873 (-16.6%)	-47,602 (-12.2%)	-22,038 (-5.6%)	-60,187 (-15.4%)	-38,100 (-9.7%)	-34,201 (-8.7%)
Queens County	-3,873 (-0.4%)	+21,258 (+2.0%)	-10,804 (-1.0%)	-47,911 (-4.4%)	-19,342 (-1.8%)	+4,979 (+0.5%)	-7,812 (-0.7%)	+14,644 (+1.3%)	+5,311 (+0.5%)
Richmond County (Staten Island)	-4,884 (-8.6%)	-5,071 (-8.9%)	-4,940 (-8.7%)	-4,539 (-8.0%)	-6,002 (-10.5%)	-4,370 (-7.7%)	-4,917 (-8.6%)	-5,636 (-9.9%)	-4,405 (-7.7%)
NEW YORK CITY TOTAL	**-128,847 (-5.1%)**	**-29,731 (-1.2%)**	**-84,406 (-3.4%)**	**-219,068 (-8.8%)**	**-130,412 (-5.2%)**	**-25,521 (-1.0%)**	**-147,687 (-5.9%)**	**-43,481 (-1.7%)**	**-40,040 (-1.6%)**

Notes: Projections include VMT only during fares and do not include cruising without passenger(s), to reflect effects on demand and revenues.

Tolling Scenario Modified G was not included in Final EA Table 17-14, but was discussed in the narrative on the following page, Final EA page 17-54.

Yellow shading in the table highlights the Final EA tolling scenarios that limited tolls on taxis and FHVs to one passenger-vehicle toll per day.

The per-trip tolls in the adopted toll structure would be equivalent to the auto peak rate of $15 (based on TLC analysis of trips made by TLC-licensed vehicles in May 2023: for taxis the average daily number of trips with passengers to/from/within the CBD is 12, and for FHVs it is 6).

ANALYSIS AND RESULTS: LOCAL (NEIGHBORHOOD) EFFECTS RELATED TO TRAFFIC DIVERSIONS

For the Final EA, the Project Sponsors conducted additional analysis of the potential effects of traffic diversions resulting from the CBD Tolling Alternative on environmental justice communities that are already highly burdened by pre-existing air pollution and chronic diseases and could see increased traffic. The analysis concluded that in some environmental justice census tracts that have high pre-existing pollutant burdens or chronic disease burdens where the CBD Tolling Alternative would increase traffic, these traffic increases have the potential to increase pollutant burdens and could contribute to chronic disease burdens and therefore could constitute a potential adverse effect on these particularly vulnerable environmental justice populations. The specific census tracts that would experience increased or decreased traffic changed slightly depending on the tolling scenario, but the affected communities remain largely the same. The effects would vary in magnitude depending on the additional volume of traffic and the extent of pre-existing pollutant and chronic disease burdens.

As in the Final EA, under the adopted toll structure the Project Sponsors committed to implement mitigation measures related to potential Project-related traffic diversions, related air pollutants, and associated health effects to benefit environmental justice communities that are already highly burdened by pre-existing air pollution and/or chronic diseases, relative to national percentiles. Mitigation measures will include regional measures, which will reduce truck diversions and reduce emissions. These regional measures will benefit communities with census tracts where individuals experience either pre-existing pollutant burdens or chronic-disease burdens at or above the 90th percentile among all communities in the United States, and where the Project could increase exposure to truck traffic due to traffic diversions as well as related pollutants and associated health effects.

Mitigation measures also include place-based measures to reduce emissions and improve air quality and/or health outcomes in areas with the greatest pre-existing burdens that would also be affected by Project-related diversions. As in the Final EA, under the adopted toll structure, the areas identified for place-based mitigation are the environmental justice census tracts where individuals experience at least one pre-existing pollutant burden and at least one pre-existing chronic disease burden at or above the 90th percentile, nationally, and where truck proximity could increase as a result of the Project.

In addition, in the Final EA and under the adopted toll structure, results from analysis of non-truck traffic effects drew attention to traffic increases on the FDR Drive adjacent to the Lower Manhattan and Lower East Side communities. Additional modeling for the Final EA indicated that 25 to 35 percent of these increases could be mitigated by ensuring that vehicles traveling to Manhattan on the Brooklyn Bridge and then southbound on the FDR Drive by first going north, then exiting from the FDR Drive to East Houston Street, and then immediately turn left to head back south on the FDR Drive, would be tolled. In addition to the traffic monitoring plan for this area related to potential adverse effects on traffic, the adopted toll structure does not make this a free movement reducing traffic diversions in the Lower Manhattan and Lower East Side communities. The increases in AADT on the FDR Drive described in **Table 17.11,** below, do not include this 25 to 35 percent reduction, meaning that the potential increases shown are larger than those that could be anticipated.

Additional detail on these mitigation measures and how they will be allocated can be found in the sections **"Regional and Place-Based Mitigation"** and **"Benefits and Allocation of Funding for Mitigation Measures,"** below.

To fund these mitigation measures, the Project Sponsors committed to $155 million over 5 years in the Final EA. Under the adopted toll structure, the Project Sponsors will commit $248 million over 5 years by deepening the overnight toll discount and expanding the hours in which the discount will be offered. [10] Table 17-13 shows the mitigation measures committed to by the Project Sponsors.

An adaptive management approach will be used, including monitoring the efficacy of mitigation, ongoing stakeholder consultation, and making adjustments as warranted. As committed to in the Final EA, TBTA has begun work with NYC DOHMH to expand New York City's existing air-quality monitoring network and is gathering readings from monitoring sites in Bergen and Hudson Counties, New Jersey through USEPA's Air Quality System. The monitoring effort will allow the Project Sponsors to determine whether any changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. As part of adaptive management, the toll schedule adopted by the TBTA Board allows for a percentage increase/decrease of up to 10 percent on CBD tolls and credits to respond to monitoring results if appropriate.

The analysis of effects related to traffic diversions on highly burdened environmental justice communities evaluated whether non-truck traffic proximity and truck traffic proximity could increase as a result of the Project in each census tract within the local study area. The analysis also evaluated whether truck traffic proximity could decrease. As defined in the Final EA Appendix 17D, Section 17D.4 (page 17D-14), highway non-truck and highway truck traffic proximity are measures of the amount of daily highway traffic near the population center within each census tract. Highway truck traffic proximity was a particular focus, because diesel emissions have a higher level of particulate matter, which is associated with adverse health outcomes, and because Project-related diversions would mainly occur on highways.[11]

Census tracts are, as defined by the U.S. Census Bureau, statistical subdivisions of a county or statistically equivalent entity. Communities contain multiple census tracts. As described in Final EA Appendix 17D, communities are defined as either municipalities (outside New York City) or neighborhoods (within New York City).[12] Within the five New York City counties, these neighborhoods were identified using the United Hospital Fund (UHF) neighborhood definitions—a geography designed for health research.[13] Environmental justice census tracts are census tracts where a greater proportion of the population is minority and/or low-income, as identified using the methodology described in Final EA Chapter 17, Section 17.5.1 (page 17-8).

Environmental justice census tracts where individuals experience at least one pre-existing pollutant burden or at least one pre-existing chronic disease burden at or above the 90th percentile, nationally, and where

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10 The $248 million committed is in addition to $5 million allocated for mitigation and enhancement measures related to monitoring across other topics, along with $82 million for the low-income toll discount to be implemented.

11 See Final EA, Appendix 17D, Section 17D-6.1.1 on page 17D-43 and 17D-6.1.3 on page 17D-44 for an explanation of how truck traffic proximity is calculated.

12 See Final EA Appendix 17D, Section 17D-6.1.4, p. 17D-50.

13 See Final EA, Appendix 17D, Section 17D-5.5.2, page 17D-29, Footnote 68 for more information on UHF neighborhoods.

truck proximity could increase as a result of the Project, were identified as "90 or 90" census tracts. Environmental justice census tracts where individuals experience at least one pre-existing pollutant burden and at least one pre-existing chronic disease burden at or above the 90th percentile, nationally, and where truck proximity could increase as a result of the Project were identified as "90 and 90" census tracts.[14]

As noted in Final EA, Appendix 17D, Section 17D-6.1.2, truck diversions would occur in every tolling scenario, but Tolling Scenario E had the maximum predicted truck diversions by volume for all census tracts in the 10-county environmental justice study area.[15] For this reason, the Project Sponsors presented potential truck-traffic proximity under Tolling Scenario E in the Final EA. The Project Sponsors also presented potential non-truck traffic proximity under Tolling Scenario E, as well as Tolling Scenario G; as noted in Section 17D-6.1.5 of Final EA Appendix 17D, modeled traffic results from the BPM indicated that Tolling Scenario G was the scenario with the largest potential increases in non-truck traffic across the environmental justice-designated census tracts in the 10-county environmental justice study area.[16] Any community with one or more environmental-justice-designated census tract meeting the "90 or 90" or "90 and 90" criteria was identified in the Final EA as a community that is already overburdened by pre-existing air pollution and chronic diseases. The Project Sponsors committed to a package of regional (for "90 or 90" communities) and place-based (for "90 and 90" communities) measures to mitigate potential adverse effects on environmental justice populations.

The same methodology described in Appendix 17D of the Final EA, "Technical Memorandum: Considerations for Environmental Justice Communities with Existing Pollution or Health Burdens," was used to evaluate the adopted toll structure for potential effects and identify the relevant "90 or 90" and "90 and 90" communities.

The overall findings for the adopted toll structure are described in the following paragraphs.

Truck Traffic

- **Potential Project Truck Diversion Effects:** Considering the shares of environmental-justice-designated census tracts and non-environmental-justice census tracts with potential truck diversion effects (defined as increases in truck-traffic proximity), the adopted toll structure would have more balanced potential truck diversion effects. As shown in **Table 17.3**, which is Final EA Table 17D-11 with the adopted toll structure added, for the 434 census tracts in the 10-county environmental justice study area that are within 300 meters of a highway, the Final EA predicted that 50 percent of the environmental justice-designated census tracts and 41 percent of the non-environmental justice-designated census tracts would have an increase in truck traffic proximity (a total of 205 tracts). **Table 17.3** also shows that 18 percent of environmental justice-designated census tracts and 19 percent of the non-environmental justice-designated census tracts would have a decrease in truck traffic proximity (a total of 79 tracts). For the adopted toll structure, the number of census tracts affected by

[14] Note that, by these definitions from the Final EA, "90 and 90" census tracts are also "90 or 90" census tracts; the former is a subset of the latter.
[15] Final EA Appendix 17D, page. 17D-43.
[16] Final EA Appendix 17D, page 17D-60.

an increase in truck traffic proximity would be slightly higher (209 tracts rather than 205 tracts), but the results would be more evenly distributed between non-environmental justice-designated tracts (47 percent rather than 41 percent) and environmental justice-designated tracts (49 percent rather than 50 percent) and the number of affected environmental justice-designated tracts would be lower than with the Final EA (151 rather than 154). The number of census tracts having a decrease in truck traffic proximity would be slightly lower (74 tracts rather than 79 tracts); a greater number of environmental justice-designated census tracts would have a decrease (59 tracts rather than 56 tracts), and a smaller number of non-environmental justice-designated tracts would have a decrease (15 tracts rather than 23 tracts).

- Intensity of Potential Truck-Traffic Increases: The adopted toll structure would have lower intensities of truck-traffic proximity increases in "90 and 90" and "90 or 90" environmental justice-designated census tracts. This is illustrated in Table 17.4, which provides the minimum, average, and maximum increase in truck-traffic proximity for the "90 and 90" and "90 or 90" environmental justice-designated census tracts for Final EA Tolling Scenario E and the adopted toll structure. This proximity factor is closely related to the exposure of the emission pollutants. As described in Final EA Appendix 17D, "the change in truck traffic proximity for each environmental justice census tract is equal to the difference between truck AADT on freeways and interstates in the CBD Tolling Alternative and the No Build Alternative, as forecasted in the BPM, within 300 meters (approximately 1,000 feet) of the population-weighted census tract centroid, divided by distance in meters."[17] For "90 and 90" environmental justice-designated census tracts, the average increase and maximum increase in truck-traffic proximity that would occur with the adopted toll structure shows decreases from the Final EA Tolling Scenario E, with the average reduced from 6.80 to 4.85 and the maximum reduced from 122.71 to 72.13. Similarly, the "90 or 90" environmental justice-designated census tracts show a decrease in the average and maximum increases in truck-traffic proximity with the adopted toll structure compared to the Final EA Tolling Scenario E. The average truck-traffic proximity increase under the Final EA was 7.50 and the average with the adopted toll structure is 4.99. The maximum increase for these "90 or 90" census tracts drops from 122.71 to 72.13 with the adopted toll structure. **Figure 17.1** visually compares the intensity of potential truck traffic proximity decreases in Tolling Scenario E and the adopted toll structure among "90 or 90" environmental justice census tracts; **Figure 17.2** provides the same comparison but for the intensity of potential truck traffic proximity increases.

[17] See Final EA, Appendix 17D, Section 17D-6.1.1, page 17D-43. For further description of traffic proximity in US EPA's EJScreen, calculation methods, and how to interpret the measure, see Final EA, Appendix 17D, Section 17D-4, pp. 17D-14 and 17D-15, Section 17D-6.1.1, p. 17D-43, Sections 17D-6.1.3 and 17D-6.1.4, p. 17D-44.

Table 17.3 - Modified Final EA Table 17D-11. Summary of Project Effects on Truck Traffic Proximity (Tolling Scenario E) - With the Adopted Toll Structure Added

TYPE OF HIGHWAY TRUCK TRAFFIC PROXIMITY CHANGES RESULTING FROM THE PROJECT	NUMBER OF TRACTS WITH PRE-EXISTING AIR POLLUTANT OR CHRONIC DISEASE BURDENS WITHIN 300 METERS OF A HIGHWAY						% OF COMMUNITY TYPE AFFECTED			
	FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE			FINAL EA SCENARIO E		ADOPTED TOLL STRUCTURE	
	NON-ENVIRON-MENTAL JUSTICE TRACTS	ENVIRON-MENTAL JUSTICE TRACTS	TOTAL TRACTS	NON-ENVIRON-MENTAL JUSTICE TRACTS	ENVIRON-MENTAL JUSTICE TRACTS	TOTAL TRACTS	NON-ENVIRON-MENTAL JUSTICE TRACTS	ENVIRON-MENTAL JUSTICE TRACTS	NON-ENVIRON-MENTAL JUSTICE TRACTS	ENVIRON-MENTAL JUSTICE TRACTS
Tracts with Decrease in Truck Traffic Proximity	23	56	79	15	59	74	19%	18%	12%	19%
Tracts with No Change in Truck Traffic Proximity	49	101	150	50	101	151	40%	32%	41%	32%
Tracts with Increase in Truck Traffic Proximity	51	154	205	58	151	209	41%	50%	47%	49%
Total Tracts	123	311	434	123	311	434	100%	100%	100%	100%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA National Air Toxics Assessment (NATA) 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; Centers for Disease Control (CDC) PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

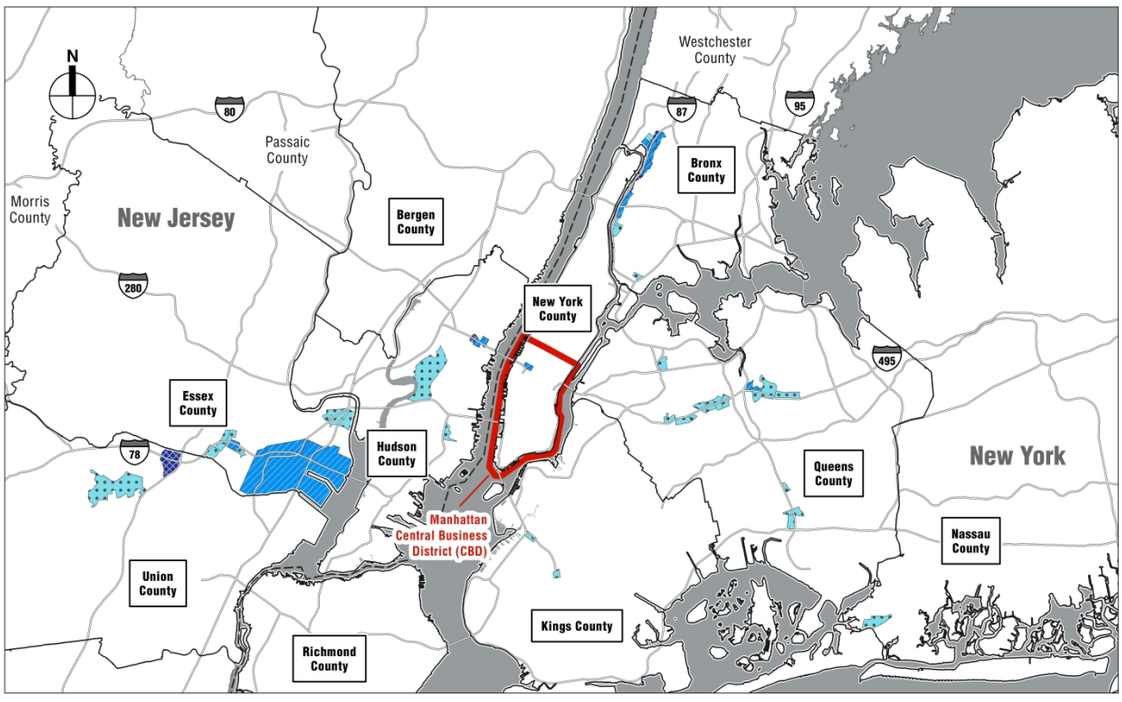
Table 17.4 - Range of Truck-Traffic Proximity Increases for Environmental Justice-Designated Overburdened Tracts, Final EA and Adopted Toll Structure

TOPIC	LOCATION	DATA SHOWN IN TABLE	TRUCK TRAFFIC PROXIMITY CHANGE (DAILY TRUCKS PER METER DISTANCE)	
			FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE
Increases in truck traffic proximity, as a result of traffic diversions, in communities already overburdened by preexisting air pollution and chronic diseases	90 AND 90 Environmental Justice-Designated Census Tracts (Place-Based)	Minimum Increase	0.21	0.13
		Average Increase	6.80	4.85
		Maximum Increase	122.71	72.13
	90 OR 90 Environmental Justice-Designated Census Tracts (Regional)	Minimum Increase	0.01	0.02
		Average Increase	7.50	4.99
		Maximum Increase	122.71	72.13

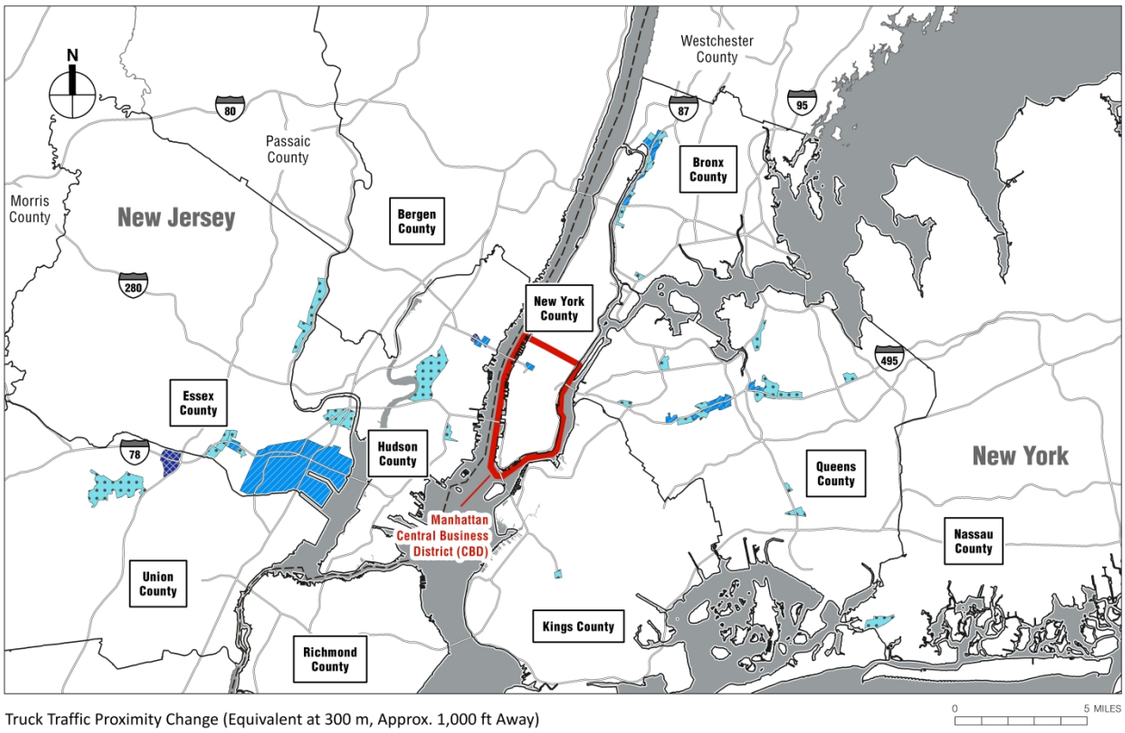
Sources: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Figure 17.1 – Environmental Justice Census Tracts with Either Pre-Existing Pollutant Indicators or Pre-Existing Chronic-Disease Indicators At or Above the 90th Percentile That Could Experience Truck Traffic Decreases

Tolling Scenario E



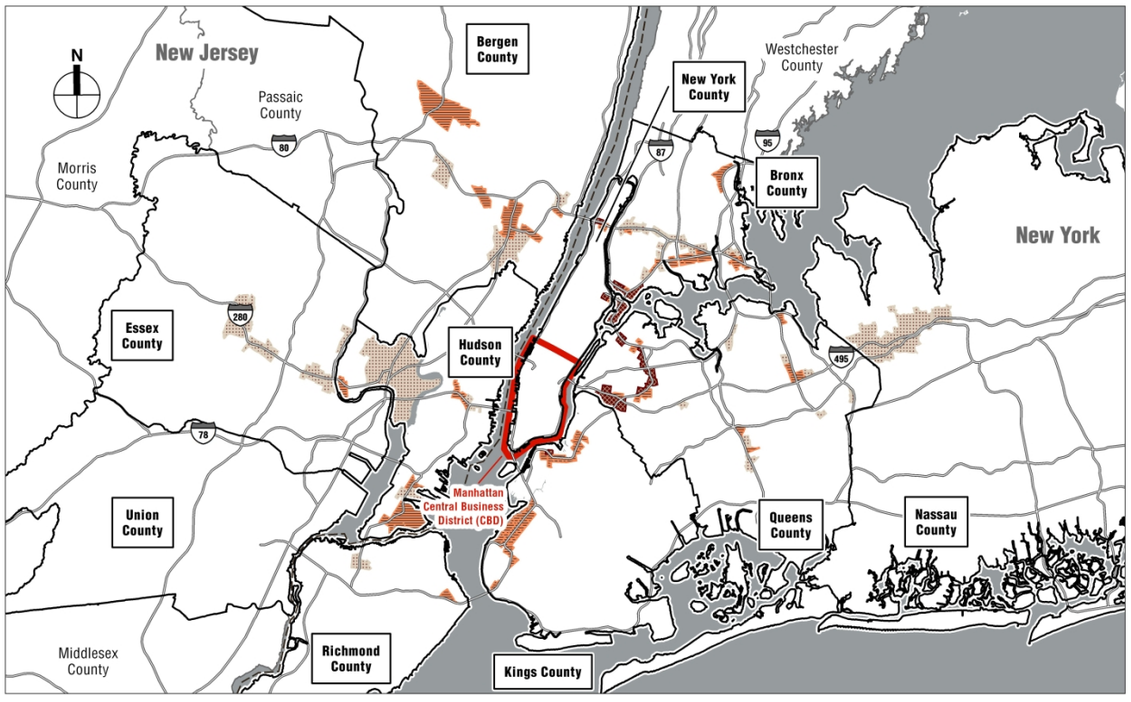
Adopted Toll Structure



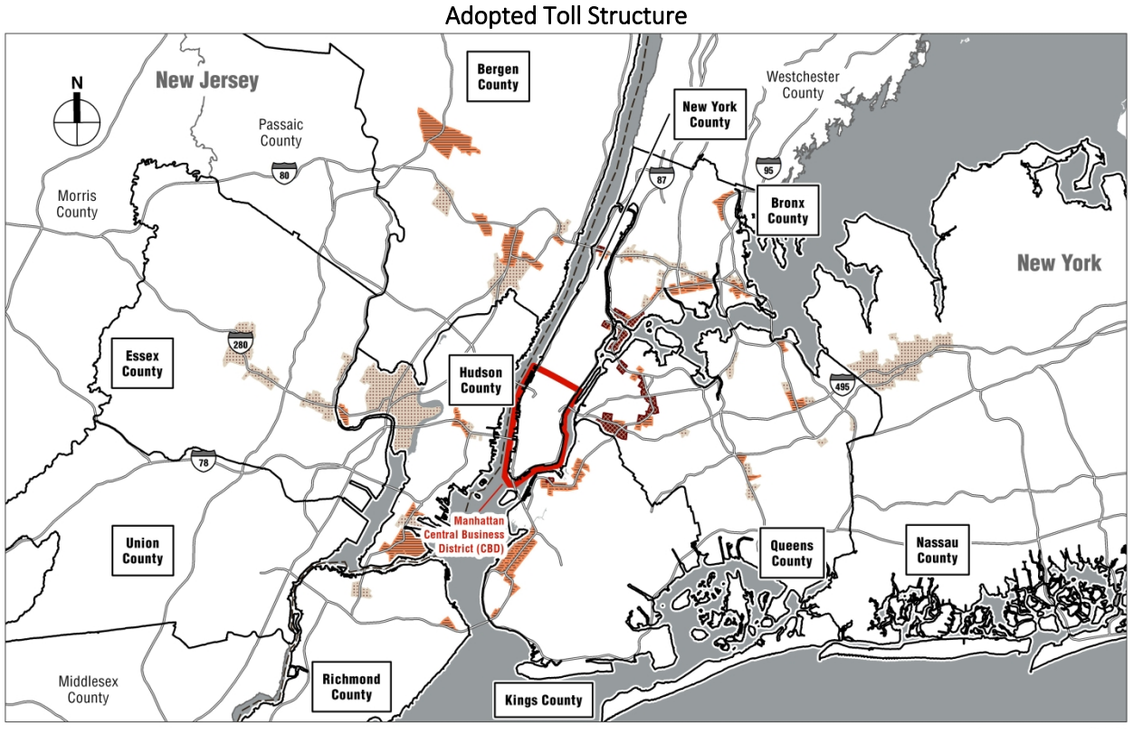
Source: USEPA NATA and Agency Air Quality System via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Figure 17.2 – Environmental Justice Census Tracts with Either Pre-Existing Pollutant Indicators or Pre-Existing Chronic-Disease Indicators At or Above the 90th Percentile That Could Experience Truck Traffic Increases

Tolling Scenario E



Adopted Toll Structure



Truck Traffic Proximity Change (Equivalent at 300 m, Approx. 1,000 ft Away)
Increase
1 - 700 trucks
701 - 4,200
4,201 +

Sources: Source: USEPA NATA and Agency Air Quality System via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

- **Location of Tracts and Communities with Potential Truck Traffic Effects**: The adopted toll structure would have small differences in the tracts and communities where potential truck diversion effects would occur from those described in the Final EA, as summarized in **Table 17.6**.
  - Three new "90 or 90" tracts with potential truck traffic proximity decreases in communities already identified with potential truck traffic proximity decreases (included in **Table 17.5**). These previously identified communities with an additional tract with potential truck-traffic proximity decreases are Flushing–Clearview (Queens County), Ridgewood–Forest Hills (Queens County), and Newark (Essex County).
  - Three new "90 or 90" communities identified with potential truck traffic proximity decreases (Bayside–Little Neck and Long Island City–Astoria, Queens County; Belleville, Essex County; see **Table 17.5**, which is a modification of Final EA Table 17D-14 with the adopted toll structure added). One community (Downtown–Heights–Slope/Park Slope, Kings County) identified for potential truck traffic proximity decreases under Scenario E is not identified under the adopted toll structure for potential truck traffic proximity decreases because this tract now has a potential truck traffic proximity increase. This tract has been removed from **Table 17.5**, is highlighted in **Table 17.7**, and is included in **Table 17.8**).
  - Three new tracts with potential truck traffic proximity increases in "90 or 90" communities identified in the Final EA (as highlighted in Table 17.7, included in **Table 17.8** and shown in **Figure 17.3**). These tracts are located (one each) in each of the following communities: High Bridge–Morrisania, Bronx County; Downtown–Heights–Slope/Downtown Brooklyn–Fort Greene, Kings County; and Southwest Queens, Queens County. In these tracts, modeling indicates potential truck traffic proximity increases ranging from 0.69 to 1.05 daily trucks per meter distance. These values are well below the average increase of 4.99 daily trucks per meter distance under the adopted toll structure among "90 or 90" tracts with potential increases. These values are also well below the average 7.50 increase among "90 or 90" tracts under Final EA Scenario E. These three tracts would benefit from the regional mitigation measures of expanding the NYC Clean Trucks and NYCDOT Off-Hours Delivery Programs. Note that these three new "90 or 90" tracts include the new "90 and 90" tract in High Bridge–Morrisania.
  - One fewer "90 or 90" community identified for regional mitigation (Ridgewood–Forest Hills, Queens County, identified in **Figure 17.3**). **Table 17.8**, below, is a modified version of Final EA Table 17D-15 that describes the communities identified for regional mitigation with the adopted toll structure added. Under the adopted toll structure this community no longer has potential truck traffic effects.
  - One new "90 and 90" tract within the already identified High Bridge–Morrisania, Bronx County community identified for place-based mitigation along the Major Deegan Expressway; under Final EA Scenario E, modeling indicated a potential truck traffic proximity decrease of -0.41, whereas under the adopted toll structure, modeling indicates a potential truck traffic proximity increase of 0.94 (highlighted in Table 17.7, and included in Table 17.9 as well as in Figure 17.4**,** which is an updated version of Final EA Figure 17D-18 reflecting the adopted toll structure).No new "90 and 90" communities identified for place-based mitigation (as illustrated in **Table 17.9** with the adopted toll structure added, below).

– In the Final EA, Appendix 17D, Tables 17D-14, 17D-15, and 17D-17 depicted the baseline numbers of trucks traveling through or adjacent to these communities by including estimates of pre-existing truck AADT on some highways, as examples, under the No Action Alternative. The tables also described the potential change in truck volumes under Tolling Scenario E, and the percentage change of the AADT. The versions of those tables below (**Table 17.5**, **Table 17.8**, and **Table 17.9**, with the adopted toll structure added) present these truck-volume data as well.[18]

[18] As noted in the Final EA, Appendix 17D, Section 17D-6.1.4., in some cases, nearby roadways will show decreases in truck AADT when truck traffic proximity increases, and vice versa. This occurs because of the distance weighting that is part of calculating changes in truck traffic proximity. A nearby roadway may show a net increase in truck traffic AADT, but the center of a census tract's population may be closer to a portion of the roadway with estimated decreases in truck volumes, meaning that exposure to emissions and truck traffic proximity decreases (footnote 102, p. 17D-50).

Table 17.5 - Modified Final EA Table 17D-14. Environmental Justice Tracts and Communities That Could Experience Truck Traffic Proximity Decreases (Tolling Scenario E), With the Adopted Toll Structure ("90 or 90" Tracts and Communities)

COUNTY	COMMUNITY	NUMBER OF TRACTS BY NUMBER OF POLLUTANT OR CHRONIC DISEASE BURDENS (90TH PERCENTILE)		HIGHWAY	DAILY TRUCK VOLUME					
					FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)*	CHANGE (AADT)	CHANGE (%)	NO ACTION (AADT)*	CHANGE (AADT)	CHANGE (%)
Bronx, NY	Crotona–Tremont	5	5	Major Deegan Expwy	15,042	-643	-4%	15,042	-372	-2%
	Fordham–Bronx Park	1	1	Major Deegan Expwy	15,024	-686	-5%	15,024	-414	-3%
	High Bridge–Morrisania	3	2	Major Deegan Expwy	11,872	-165	-1%	11,803	-195	-2%
	Hunts Point–Mott Haven**	1	1	Bruckner Expwy	5,624	277	5%	5,624	263	5%
	Kingsbridge–Riverdale	7	7	Major Deegan Expwy	14,679	-595	-4%	14,679	-331	-2%
Kings, NY	Borough Park***	1	1	Ocean Pkwy	5,689	-11	-0.2%	5,689	64	1%
New York, NY	Chelsea–Clinton	1	1	Lincoln Tunnel	2,069	-155	-7%	2,069	-273	-13%
Queens, NY	Bayside–Little Neck		1	Long Island Expwy	Community does not have tracts with potential truck-traffic decreases adjacent to Long Island Expwy			18,049	-2	-0.01%
	Flushing–Clearview†	2	3	Long Island Expwy	11,340	-290	-3%	11,340	-371	-3%
				Whitestone Expwy	Community does not have tracts with potential truck-traffic decreases adjacent to Whitestone Expwy			7,929	174	2%
	Fresh Meadows	2	2	Long Island Expwy	11,542	-283	-2%	11,542	-357	-3%
	Jamaica	2	2	Van Wyck Expwy	7,487	-104	-1%	7,487	-60	-1%
	Long Island City–Astoria		1	Brooklyn Queens Expwy	Community does not have tracts with potential truck-traffic decreases adjacent to Brooklyn Queens Expwy			9,634	1,293	13%

COUNTY	COMMUNITY	NUMBER OF TRACTS BY NUMBER OF POLLUTANT OR CHRONIC DISEASE BURDENS (90TH PERCENTILE)		HIGHWAY	DAILY TRUCK VOLUME					
					FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)*	CHANGE (AADT)	CHANGE (%)	NO ACTION (AADT)*	CHANGE (AADT)	CHANGE (%)
				Long Island Expwy	Community does not have tracts with potential truck-traffic decreases adjacent to Long Island Expwy			3,115	-157	-5%
	Ridgewood–Forest Hills	5	6	Long Island Expwy	12,250	-153	-1%	12,250	-339	-3%
	Southwest Queens	2	1	Van Wyck Expwy	5,039	-102	-2%	7,049	-132	-2%
	West Queens	6	6	Brooklyn Queens Expwy East	2,303	-64	-3%	2,303	-28	-1%
				Long Island Expwy	12,443	-170	-1%	12,443	-338	-3%
Essex, NJ	Belleville		1	McCarter Hwy (NJ Rt 21)	Community does not have tracts with potential truck-traffic decreases adjacent to McCarter Hwy			5,499	-4	-0.1%
	Newark	9	10	I-78	13,535	-547	-4%	13,535	-425	-3%
				I-95	12,573	-124	-1%	12,573	-25	-0.2%
				McCarter Hwy	5,154	-23	-0.4%	5,168	-16	-0.3%
				US 1-9	7,274	-30	-0.4%	7,274	-74	-1%
				US 22	5,018	-24	-0.5%	5,018	-31	-1%
Hudson, NJ	Jersey City	2	2	I-78	1,538	-580	-38%	1,538	-361	-23%
				Pulaski Skwy	4,622	-142	-3%	4,622	-5	-0.1%
	Union City	3	3	NJ 495	7,813	-703	-9%	7,813	-863	-11%
Union, NJ	Union	2	2	I-78	8,569	-310	-4%	8,569	-239	-3%
				US 22	4,289	-1	-0.03%	4,289	-3	-0.1%
Nassau, NY	Hempstead	1	1	Nassau Expwy	1,708	-2	-0.1%	1,708	-1	-0.1%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

Results are not shown for Downtown–Heights–Slope (Park Slope) because no tracts with potential truck-traffic proximity decreases appeared in this community under the adopted toll structure.

* In some cases, specific tracts with potential traffic increases along a certain highway and within a community and differ between Scenario E, Scenario G, and the adopted toll structure. In these cases, the "No Action" AADT will differ because the section of the highway analyzed differs.

** Under Tolling Scenario E (as noted in Final EA Table 17D-14) as well as the adopted toll structure, truck traffic proximity is predicted to decrease in Census Tract 27.02, Bronx County, even though AADT on this highway shows a net increase. The center of the tract's population is near a portion of the highway where modeling indicates that truck traffic could decrease.

*** Under the adopted toll structure, Truck traffic proximity decreases in Census Tract 494, Kings County, even though AADT on this highway shows a net increase. Though the highway adjacent to the tract is predicted to see increases in truck traffic, the center of the tract's population is near a portion of the highway where modeling indicates that truck traffic could decrease.

† Under the adopted toll structure, Truck traffic proximity decreases in Census Tract 889.01, Queens County, even though AADT on the Whitestone Expwy shows a net increase. The center of the tract's population is near a portion of the highway where modeling indicates that truck traffic could decrease.

Table 17.6 - Summary of Environmental Justice Tracts and Communities That May Need Mitigation (Tolling Scenario E), with the Adopted Toll Structure

TOPIC	LOCATION	DATA SHOWN IN TABLE	FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE
Increases in truck traffic, as a result of traffic diversions, in communities already overburdened by preexisting air pollution and chronic diseases	**90 AND 90 (Place-Based)**	**Total Communities**	**13***	**13***
		Total Tracts (Black indicates new tracts in already-identified communities, grey in parentheses are tracts that were removed compared to the Final EA)	**55**	**56** 1 additional tract in High Bridge-Morrisania, Bronx, NY (truck traffic proximity increase of 0.94 trucks per meter distance)
		Communities Added (Relative to Final EA Tolling Scenario E)	--	None
		Communities Removed (Relative to Final EA Tolling Scenario E)	--	None
Increases in truck traffic, as a result of traffic diversions, in communities already overburdened by preexisting air pollution or chronic diseases	**90 OR 90 (Regional)**	**Total Communities**	**38**	**37**
		Total Tracts (Black indicates new tracts in already-identified communities, grey in parentheses are tracts that were removed compared to the Final EA)	**154**	**151** 1 additional tract in High Bridge-Morrisania, Bronx, NY (same as "90 AND 90" tract above; truck traffic proximity increase of 0.94 trucks per meter distance) 1 additional tract in Downtown Brooklyn-Fort Greene / Downtown–Heights–Slope, Kings, NY (truck traffic proximity increase of 0.69 trucks per meter distance) 1 additional tract in Southwest Queens, Queens, NY (truck traffic proximity increase of 1.05 trucks per meter distance) (1 less tract in Bayside-Little Neck, Queens, NY) (1 less tract in Flushing-Clearview, Queens, NY) (1 less tract in Long Island City-Astoria, Queens, NY) (1 less tract in Ridgewood-Forest Hills, Queens) (1 less tract in Southeast Queens, Queens, NY) (1 less tract in Newark, Essex, NJ)
		Communities Added (Relative to Final EA Tolling Scenario E)	--	None

TOPIC	LOCATION	DATA SHOWN IN TABLE	FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE
		Communities Removed (Relative to Final EA Tolling Scenario E)	--	1 (Ridgewood-Forest Hills, Queens, NY is removed)

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

This table summarizes results analogous to those found in Final EA Tables 17D-15 and 17D-17 in Appendix 17D. Detailed versions of those tables with the adopted toll structure added are provided later in this section of the reevaluation.

* Final EA Table 17D-17 for Tolling Scenario E grouped the 13 identified communities into 11 table rows: High Bridge – Morrisania was grouped with "Crotona–Tremont" in one line because tracts in both communities would have potential effects from truck traffic on the Cross Bronx Expressway. Hunts Point–Mott Haven and Pelham–Throgs Neck were also grouped in one line because tracts in both communities would have potential effects from truck traffic on the Bruckner Expressway. City of Orange, East Orange, and Newark were also grouped in one line because tracts in these three communities would have potential effects from truck traffic on I-280. Finally, Table 17D-17 did not show Tract 3009 in North Hempstead, Nassau County. As noted, "[p]otential truck volume increases and decreases on roadways within the tract would ultimately cancel each other out and result in no change of truck traffic proximity for the residential populations within the tract."

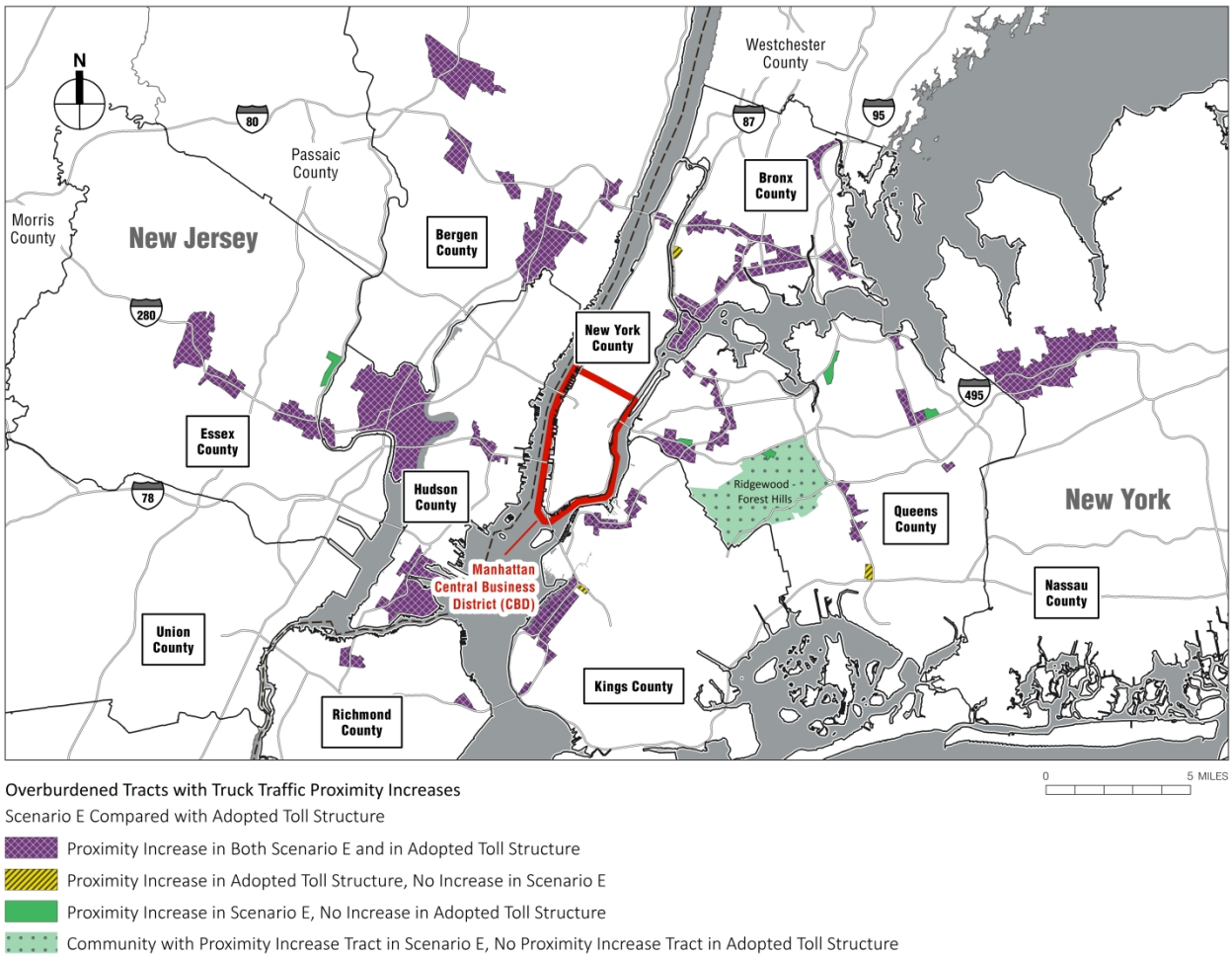
Table 17.7 - Change in Truck Traffic Proximity for Overburdened Environmental Justice-Designated Tracts That Would Have Increases Under the Adopted Toll Structure But Decreases in Final EA Tolling Scenario E

LOCATION	TRUCK TRAFFIC PROXIMITY CHANGE		HIGHWAY	DAILY TRUCK VOLUME				
	FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)	FINAL EA SCENARIO E		ADOPTED TOLL STRUCTURE	
					Change (AADT)	Change (%)	Change (AADT)	Change (%)
Tract 189, Bronx, NY (High Bridge–Morrisania, 90 AND 90)	-0.41	0.94	Major Deegan Expwy	14,106	128*	1%*	240	2%
Tract 143, Kings, NY (Downtown–Heights–Slope / Park Slope, 90 OR 90)	-0.60	0.69	Prospect Expwy	4,509	-12	-0.3%	43	1%
Tract 814, Queens, NY (Southwest Queens, 90 OR 90)	-0.40	1.05	Van Wyck Expwy	4,272	-126	-3%	13	0.3%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

* Under Tolling Scenario E, truck traffic proximity would decrease in this census tract even though truck AADT would increase, because the center of its population is near a portion of the highway where modeling indicates that truck traffic could decrease.

Figure 17.3 - "90 or 90" Environmental Justice Census Tracts and Communities That Could Experience Truck Traffic Increases, Tolling Scenario E Compared with the Adopted Toll Structure



Source: USEPA NATA and Agency Air Quality System via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Table 17.8 - Modified Final EA Table 17D-15. Environmental Justice Tracts and Communities That May Need Mitigation (Tolling Scenario E), With the Adopted Toll Structure ("90 or 90" Tracts and Communities)

COUNTY	COMMUNITY	NO. OF TRACTS WITH AT LEAST ONE PRE-EXISTING POLLUTANT OR CHRONIC DISEASE BURDEN (90TH PERCENTILE)		HIGHWAY	DAILY TRUCK VOLUME					
					FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)	NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)
Bronx, NY	Crotona–Tremont	16	16	Cross Bronx Expwy	21,819	168	1%	21,819	237	1%
	High Bridge–Morrisania	4	5	Cross Bronx Expwy	21,819	168	1%	21,819	237	1%
				Major Deegan Expwy	Community does not have tracts with potential truck-traffic increases adjacent to Major Deegan Expwy			14,106	240	2%
	Hunts Point–Mott Haven	11	11	Major Deegan & Bruckner Expwys	7,618	874	11%	7,618	695	9%
				Approach to RFK Bridge	9,868	1,339	14%	9,868	1,100	11%
	Northeast Bronx	1	1	New England Thruway	13,640	191	1%	13,640	106	1%
	Pelham–Throgs Neck	17	17	Cross Bronx Expwy Ext.	9,580	398	4%	9,580	388	4%
				Throgs Neck Expwy	4,194	50	1%	4,194	73	2%
				Bruckner Expwy	5,624	277	5%	5,624	263	5%
Kings, NY	Bensonhurst–Bay Ridge	2	2	Gowanus Expwy	8,328	495	6%	8,328	270	3%
	Downtown–Heights–Slope (Downtown Brooklyn–Fort Greene)*	8	9	Brooklyn Queens Expwy	14,107	891	6%	14,107	378	3%
				Prospect Expwy	Community does not have tracts with potential truck-traffic increases adjacent to Prospect Expwy			5,942	51	1%
	Greenpoint (South Williamsburg)**	7	7	Brooklyn Queens Expwy	15,762	878	6%	15,762	452	3%
	Sunset Park	15	15	Gowanus Expwy	10,015	632	6%	10,015	290	3%
New York, NY	East Harlem	2	2	Approach to RFK Bridge	1,513	1,556	103%	1,513	423	28%
	Randall's Island***	1	1	RFK Bridge on Randall's Island	12,432	3,170	25%	12,432	1,913	15%

COUNTY	COMMUNITY	NO. OF TRACTS WITH AT LEAST ONE PRE-EXISTING POLLUTANT OR CHRONIC DISEASE BURDEN (90TH PERCENTILE)		HIGHWAY	DAILY TRUCK VOLUME					
					FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)	NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)
	Washington Heights–Inwood	3	3	Trans-Manhattan Expwy	17,370	385	2%	17,370	338	2%
Queens, NY	Bayside–Little Neck	5	4	Clearview Expwy	12,029	485	4%	12,029	480	4%
	Flushing–Clearview	2	1	Clearview Expwy	14,332	631	4%	14,332	602	4%
				Whitestone Expwy	7,929	455	6%	Community does not have tracts with potential truck-traffic increases adjacent to Whitestone Expwy		
	Jamaica	4	4	Van Wyck Expwy	8,876	303	3%	8,876	50	1%
	Long Island City–Astoria	7	6	Grand Central Pkwy	9,935	2,522	25%	9,935	1,447	15%
				Brooklyn Queens Expwy	12,572	1,982	16%	12,572	1,308	10%
				Long Island Expwy	5,247	260	5%	5,247	-96	-2%
	Southeast Queens†	2	1	Clearview Expwy	7,649	59	1%	7,649	67	1%
	Southwest Queens††	2	3	Van Wyck Expwy	7,264	12	0.2%	5,999	66	1%
	West Queens	9	9	Long Island Expwy	5,247	260	5%	5,247	-96	-2%
				Brooklyn Queens Expwy	8,657	1,696	20%	8,657	1,024	12%
Richmond, NY	Port Richmond	2	2	MLK Expwy	3,023	339	11%	3,023	84	3%
	Stapleton–St. George	1	1	Staten Island Expwy	8,625	763	9%	8,625	363	4%
Bergen, NJ	Fort Lee	2	2	I-95	21,427	368	2%	21,427	438	2%
				N Bergen Blvd (US-46)	6,499	312	5%	6,499	162	2%
				NJ Rt 4	12,413	35	0.3%	12,413	105	1%
	Hackensack	1	1	I-80	15,034	208	1%	15,034	68	0.5%
	Ridgefield Park Village	1	1	US-46	3,202	195	6%	3,202	44	1%
	Palisades Park	1	1	US-1-9-46	2,854	344	12%	2,854	70	2%
	Lodi	1	1	I-80	9,976	164	2%	9,976	211	2%

COUNTY	COMMUNITY	NO. OF TRACTS WITH AT LEAST ONE PRE-EXISTING POLLUTANT OR CHRONIC DISEASE BURDEN (90TH PERCENTILE)		HIGHWAY	DAILY TRUCK VOLUME					
					FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)	NO ACTION (AADT)	CHANGE (AADT)	CHANGE (%)
				NJ Rt 17	9,387	345	4%	9,387	258	3%
				US-46	4,420	13	0.3%	4,420	8	0.2%
	Paramus	1	1	NJ Rt 17	8,890	335	4%	8,890	201	2%
				NJ Rt 4	7,300	3	0.04%	7,300	-42	-1%
	Ridgefield	1	1	I-95	10,644	266	2%	10,644	66	1%
				US-9	2,905	48	2%	2,905	29	1%
Essex, NJ	East Orange	1	1	I-280	5,688	115	2%	5,688	137	2%
	Newark	6	5	McCarter Hwy (NJ Rt 21)	6,381	17	0.3%	Community does not have tracts with potential truck-traffic increases adjacent to McCarter Hwy (NJ Rt 21)		
				I-280	6,425	117	2%	6,425	138	2%
	West Orange	1	1	I-280	5,618	116	2%	5,618	136	2%
	City of Orange	2	2	I-280	5,722	115	2%	5,722	135	2%
Hudson, NJ	Bayonne	4	4	NJ Rt 440	7,432	443	6%	7,432	238	3%
	Harrison	2	2	I-280	6,951	118	2%	6,951	155	2%
	Jersey City	5	5	Tonnelle Ave	4,461	540	12%	4,461	479	11%
				NJ Rt 139	3,571	207	6%	3,571	341	10%
	Kearny	1	1	I-280	6,954	107	2%	6,954	154	2%
				NJ Rt 9	11,481	359	3%	11,481	260	2%
Nassau, NY	North Hempstead	2	2	Long Island Expwy	7,744	3	0.04%	7,744	3	0.04%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

Results are not shown for Ridgewood–Forest Hills because no tracts with potential truck-traffic proximity increases appeared in this community under the adopted toll structure.

In the Final EA, No Action truck AADT and Tolling Scenario E truck AADT change were miscalculated for a few portions of highways described in Tables 17D-15. This table includes corrected values. These corrections do not change the conclusions of the Final EA, as potential truck-traffic proximity increases of any magnitude were used to identify tracts and communities for potential effects and mitigation.

* As noted in Final EA, Appendix D to Appendix 17D, Part of the Downtown–Heights–Slope UHF neighborhood but labelled "Downtown Brooklyn-Fort Greene" to further specify location.

** As noted in Final EA, Appendix D to Appendix 17D, Part of the Greenpoint UHF neighborhood, but labeled as "South Williamsburg" to further specify location.

*** As noted in Final EA, Appendix D to Appendix 17D, part of the East Harlem UHF neighborhood, but labeled as "Randall's Island" to further specify location.

† Under Tolling Scenario E (as noted in Final EA Tables 17D-10 and 17D-15), Census Tract 1571.02, Queens County, a truck traffic proximity increase is predicted due to an increase of less than 1 truck per day on a Cross Island Parkway service road under Tolling Scenario E; the tract does not have potential truck-traffic proximity increases under the adopted toll structure.

†† No Action AADT differs between Tolling Scenario E and adopted toll structure on the Van Wyck Expwy because an additional tract with potential truck-traffic proximity increases under adopted toll structure extends the length of the highway along which the No Action AADT was measured.

Table 17.9 - Modified Final EA Table 17D-17. Environmental Justice Tracts and Communities That Would Merit Place-Based Mitigation (Scenario E), With the Adopted Toll Structure ("90 and 90" Tracts and Communities)

COUNTY	MAP MARKER	COMMUNITY	NO. OF TRACTS WITH AT LEAST ONE PRE-EXISTING POLLUTANT AND CHRONIC DISEASE BURDEN		HIGHWAYS	DAILY TRUCK VOLUME					
						FINAL EA SCENARIO E			ADOPTED TOLL STRUCTURE		
			FINAL EA SCENARIO E	ADOPTED TOLL STRUCTURE		No Action (AADT)	Change (AADT)	Change (%)	No Action (AADT)	Change (AADT)	Change (%)
Bronx, NY	1	High Bridge–Morrisania and Crotona–Tremont	18	18	Cross Bronx Expwy	21,819	168	0.8%	21,819	237	1.1%
			0	1	Major Deegan Expwy	Community does not have tracts with potential truck traffic increases adjacent to Major Deegan Expwy			14,106	240	1.7%
	2	Hunts Point–Mott Haven/Pelham–Throgs Neck	14	14	Bruckner Expwy	5,624	277	4.9%	5,624	263	4.7%
	3	Hunts Point–Mott Haven	3	3	Major Deegan & Bruckner Expwys	7,618	874	11.5%	7,618	695	9.1%
			1*	1*	Approach to RFK Bridge	9,868	1,339	13.6%	9,868	1,100	11.1%
	4	Pelham–Throgs Neck	1	1	Throgs Neck Expwy	4,194	50	1.2%	4,194	73	1.7%
			1	1	Cross Bronx Expwy Ext.	9,580	398	4.2%	9,580	388	4.1%
	5	Northeast Bronx	1	1	New England Thruway	13,640	191	1.4%	13,640	106	0.8%
New York,	6	East Harlem	2	2	RFK Bridge Approach at E 125th St	1,702	1,924	113.0%	1,702	672	39.5%
	7	Randall's Island**	1	1	RFK Bridge on Randall's Island	12,432	3,170	25.5%	12,432	1,913	15.4%
Kings, NY	8	Downtown–Heights–Slope (Downtown Brooklyn–Fort Greene)***	3	3	Brooklyn Queens Expwy	14,107	891	6.3%	14,107	378	2.7%
	9	Greenpoint (South Williamsburg)†	4	4	Brooklyn Queens Expwy	15,870	853	5.4%	15,870	428	2.7%
Essex, NJ	10	Orange–East Orange–Newark	6	6	I-280	6,106	116	1.9%	6,106	137	2.2%
Bergen, NJ	11	Fort Lee	1	1	I-95/George Washington Bridge	14,768	195	1.3%	14,768	231	1.6%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

As in Final EA Table 17D-17, this table lists the 13 identified communities under both Tolling Scenario E and the adopted toll structure into 11 rows. Census Tract 3009, Nassau County, not shown. As noted in Final EA, Table 17D-17, "closer examination indicates that this tract is shown with a potential increase in truck traffic proximity under Tolling Scenario E; though roadways passing through the tract have the potential to see decreases in truck traffic, the center of its population is near [a portion of] a roadway where modeling indicates that truck traffic could increase."

In the Final EA, No Build truck AADT and Scenario E truck AADT change were miscalculated for a portion of a highway described in Table 17D-17. This table includes corrected values. These corrections do not change the conclusions of the Final EA, as potential truck-traffic proximity increases of any magnitude were used to identify tracts and communities for potential effects and mitigation.

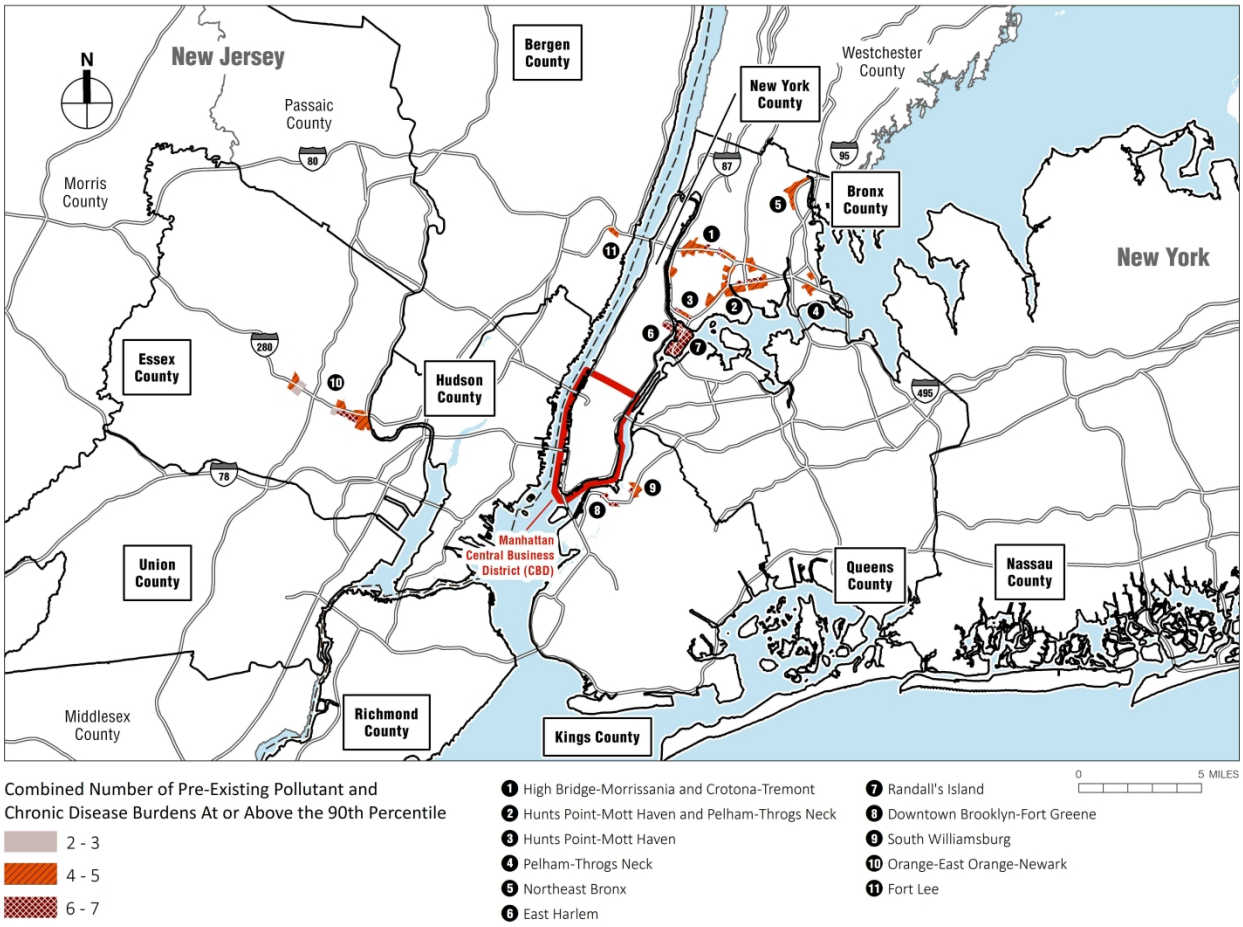
* Census Tract 27.01, Bronx County, immediately north of junction between RFK Bridge approach and Bruckner Expwy; tract also included in row for Major Deegan & Bruckner Expwys above.

** As noted in Final EA, Appendix D to Appendix 17D, part of the East Harlem UHF neighborhood, but labeled as "Randall's Island" to further specify location.

*** As noted in Final EA, Appendix D to Appendix 17D, Part of the Downtown–Heights–Slope UHF neighborhood but labelled "Downtown Brooklyn-Fort Greene" to further specify location.

† As noted in Final EA, Appendix D to Appendix 17D, Part of the Greenpoint UHF neighborhood, but labeled as "South Williamsburg" to further specify location.

Figure 17.4 - Modified Final EA Figure 17D-18. Environmental Justice Census Tracts with High Pre-Existing Pollutant and Chronic Disease Burdens Where Truck Traffic Proximity Could Potentially Increase (Adopted Toll Structure)



Source: USEPA NATA and Agency Air Quality System via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Note: Percentiles are national. Census Tract 3009, Nassau County not shown. Potential truck volume increases and decreases on roadways within the tract would ultimately cancel each other out and result in no change of truck traffic proximity for the residential populations within the tract.

Non-Truck Traffic

- **Intensity of Potential Non-Truck-Traffic Increases:** Under the adopted toll structure, non-truck traffic increases would be of a lower intensity compared to Tolling Scenario E and Tolling Scenario G (the scenarios with, respectively, the greatest overall truck and non-truck traffic diversion effects), as illustrated in **Table 17.10**. This table provides the minimum, average, and maximum increase in non-truck traffic proximity for environmental justice-designated census tracts for Final EA Tolling Scenarios E and G, as well as the adopted toll structure. Under the adopted toll structure, the minimum potential increase is 0.08, which is within the range between Tolling Scenarios E and G (0.03 to 0.31, respectively); the average potential increase under the adopted toll structure (12.69) is below the range between Tolling Scenarios E and G (22.69 to 26.37); and the maximum increase in non-truck traffic proximity under the adopted toll structure (159.61) is below the range between Tolling Scenarios E and G (216.02 to 316.77). As described in Final EA Appendix 17D, non-truck traffic proximity uses the same calculation method used for truck-traffic proximity.[19] The average and maximum non-truck-traffic proximity increases that would occur with the adopted toll structure are all smaller than with the Final EA Tolling Scenario E or G and within the range evaluated in the Final EA for the minimum.
- **Location of Tracts and Communities with Potential Non-Truck Traffic Effects:** Under the adopted toll structure, small differences in the tracts and communities where potential non-truck diversion effects would occur, without potential truck effects, from those described in the Final EA, as illustrated in Table 17.12, which is Final EA Appendix 17D, Tables 17D-12 and 17D-13 with the adopted toll structure added. No new communities with potential non-truck traffic increases but without truck-traffic increases were identified in the reevaluation.
  - Four new tracts with the adopted toll structure in overburdened communities with potential non-truck traffic proximity increases, and without truck-traffic proximity increases that did not appear under Tolling Scenarios E or G as illustrated in **Table 17.11**. Because two of these four tracts had potential truck-traffic increases under Tolling Scenarios E and G, they were not included with non-truck-traffic proximity in the Final EA/FONSI. Under the adopted toll structure, these tracts do not have potential truck-traffic proximity increases, and so appear as having potential non-truck traffic proximity effects. The communities in which these four tracts are located and the increase in non-truck AADT on nearby highways are as follows: one tract in Fordham–Bronx Park, Bronx County, with a 19-vehicle reduction in AADT on the adjacent portion of the Bronx River Parkway (the decrease in AADT was slightly more with Tolling Scenarios E and G); one tract in Pelham–Throgs Neck, Bronx County with an increase in AADT of 12 vehicles on an adjacent portion of the Bronx River Parkway; Southeast Queens, Queens County, with an increase in AADT of 802 vehicles on an adjacent portion of the Cross Island Parkway; and one tract in Newark, Essex County— with an increase in AADT of 779vehicles on an adjacent portion of McCarter Highway (NJ Route 21). The change in traffic at these locations is 2 percent or less and distributed across the day. These changes are small considering the AADT on these facilities.

[19] Final EA Appendix 17D, Section 17D-6.1.5, p. 17D-56.

– In the Final EA, Tables 17D-12 and 17D-13 provide data about some of the adjacent roadways adjacent to tracts where non-truck proximity increases could occur, including estimates of average annual daily non-truck AADT on highways under the No Action Alternative, modeled changes in non-truck AADT with Scenarios E and G, and the percentage that this change would represent from the No Action Alternative. Comparing the Final EA/FONSI data with data from the adopted toll structure (**Table 17.12**), there are nine communities identified with highways that have non-truck AADT changes outside the range of AADT changes identified for Scenarios E and G from the Final EA. Two of these communities experience a potential decrease in non-truck Traffic AADT. These two communities are Kingsbridge-Riverdale, Bronx County on the Henry Hudson Parkway (decrease in AADT of 1,226 vehicles or 2 percent) and Central Harlem-Morningside Heights, New York County on the Harlem River Drive (decrease in AADT of 315 vehicles or 0.3 percent). The FDR Drive in the community of Lower Manhattan, New York County, has a potential AADT increase (1,364 vehicles or 3 percent) below both Tolling Scenarios E and G, as does the FDR Drive in the Union Square—Lower East Side (Lower East Side) community (7,609 vehicles or 7 percent). The remaining six communities have highways with potential increases in non-truck traffic AADT ranging from 0.2 percent to 2 percent. These communities and facilities are Fordham–Bronx Park, Bronx County on the Mosholu Parkway (potential AADT increase of 393 vehicles or 1 percent), Canarsie-Flatlands, Kings County on the Belt Parkway (756 vehicles or 1 percent), Coney Island–Sheepshead Bay, Kings County, on the Belt Parkway (1,124 vehicles or 1 percent), Ridgewood–Forest Hills, Queens County on the Jackie Robinson Parkway (651 vehicles or 1 percent), and Belleville, Essex County, on the McCarter Highway NJ Rt 21 (821 vehicles or 2 percent). Hempstead, Nassau County, has two facilities with potential increases in AADT outside the range identified for Scenarios E and G, the Cross Island Parkway (234 vehicles or 0.2 percent), and the Nassau Expressway (385 vehicles or 1 percent). The increases are 2 percent and below, which is small relative to the AADT of the facilities and spread throughout the day. **Table 17.12** presents these AADT data as well.[20]

[20] As noted in the Final EA, Appendix 17D, Tables 17D-12 and 17D-13, and similar to tables describing truck traffic proximity increases, in some cases, nearby roadways will show decreases in non-truck AADT when truck traffic proximity increases, and vice versa. This occurs because of the distance weighting that is part of calculating changes in truck traffic proximity. A nearby roadway may show a net increase in truck traffic AADT, but the center of a census tract's population may be closer to a portion of the roadway with estimated decreases in truck volumes, meaning that exposure to emissions and truck traffic proximity decreases.

Table 17.10 - Range of Non-Truck-Traffic Proximity Increases for Environmental Justice-Designated Overburdened Tracts Where Truck Traffic Proximity Would Not Also Increase

TOPIC	LOCATION	DATA SHOWN IN TABLE	NON-TRUCK TRAFFIC PROXIMITY CHANGE (DAILY NON-TRUCKS PER METER DISTANCE)		
			FINAL EA SCENARIO E	FINAL EA SCENARIO G	ADOPTED TOLL STRUCTURE
Increases in non-truck traffic proximity, as a result of traffic diversions, in communities already overburdened by preexisting air pollution and chronic diseases, but where truck traffic would not also increase	80 OR 66.66 Environmental Justice Designated Census Tracts	Minimum	0.31	0.03	0.08
		Average	22.69	26.37	12.69
		Maximum	216.02	316.77	159.61

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Table 17.11 - Change in Non-Truck Traffic Proximity for Overburdened Environmental Justice-Designated Tracts Without Truck-Traffic Proximity Increases Under the Adopted Toll Structure, and Which Did Not Appear Under Tolling Scenarios E and G

LOCATION	NON-TRUCK TRAFFIC PROXIMITY CHANGE (DAILY NON-TRUCKS PER METER DISTANCE)			HIGHWAY	NON-TRUCK TRAFFIC					
					SCENARIO E		SCENARIO G		ADOPTED TOLL STRUCTURE	
	SCENARIO E	SCENARIO G	ADOPTED TOLL STRUCTURE		CHANGE (AADT)	CHANGE (%)	CHANGE (AADT)	CHANGE (%)	CHANGE (AADT)	CHANGE (%)
Tract 334, Bronx County, NY (Fordham–Bronx Park)*	-6.75	-4.57	0.34	Bronx River Pkwy	-334	-0.3%	-102	-0.1%	-19	-0.02%
Tract 68, Bronx County, NY (Pelham–Throgs Neck)	-1.43	-0.02	0.08	Bronx River Pkwy	-168	-0.3%	-8	0.0%	12	0.02%
Tract 1571.02, Queens County, NY (Southeast Queens)**	9.43	12.32	11.28	Cross Island Pkwy	463	0.4%	714	0.6%	802	0.7%
Tract 96, Essex County, NJ (Newark)***	2.08	1.80	3.30	McCarter Hwy (NJ Rt 21)	470	1%	404	1%	779	2%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

* Closer examination indicates that this tract is predicted to have an increase in non-truck traffic proximity under Scenario E and the adopted toll structure; though the portion of the Bronx River Pkwy passing through the tract is predicted to see a net decrease in non-truck traffic, the center of its population is near a portion of a highway where modeling indicates that non-truck traffic could increase.

** Under Tolling Scenario E (as noted in Final EA Tables 17D-10 and 17D-15), as well as under Tolling Scenario G, Census Tract 1571.02, Queens County shows a potential non-truck traffic proximity increase, but it also shows a potential truck traffic proximity increase due to an increase of less than 1 truck per day on a Cross Island Parkway service road. Because of this small, potential truck traffic proximity increase, this tract was included in Table 17D-15 along with other tracts showing potential truck-traffic proximity increases under Tolling Scenario E. Under the adopted toll structure, the potential increase in truck traffic proximity is zero, which is why Census Tract 1571.02, Queens County appears in this table.

*** Under Tolling Scenarios E and G, Census Tract 96, Essex County, has potential increases in both truck and non-truck traffic proximity. Thus, the tract did not appear in Final EA Tables 17D-12 and 17D-13. Under the adopted toll structure, the tract has potential truck-traffic proximity decreases, which is why it appears in this table.

Table 17.12 - Modified Final EA Table 17D-12 and 17D-13. Environmental Justice Tracts and Communities That Could Experience Non-Truck Traffic Proximity Increases without Truck Traffic Proximity Increases under the Adopted Toll Structure with Scenarios E & G

This table shows the number of environmental justice-designated tracts in each community with at least one pre-existing pollutant (80th percentile) or chronic disease burden (66.66th percentile). In the Final EA, communities identified as having these environmental justice-designated tracts with non-truck traffic proximity increases and without truck-traffic proximity increases under both Tolling Scenarios E and G were compared with communities identified as having tracts with truck-traffic proximity increases under Tolling Scenario E in order to ensure that the Final EA fully disclosed potential truck and non-truck traffic diversion effects. Blue shading behind the numbers of tracts under Tolling Scenarios E and G indicates that the corresponding community is not identified in the table of communities having highly burdened environmental justice-designated tracts with potential truck-traffic proximity increases under Tolling Scenario E (Final EA Table 17D-10). For the adopted toll structure, blue shading also appears behind the number of tracts to indicate that the corresponding community is not identified in the table of communities having highly burdened environmental justice-designated tracts with potential truck-traffic proximity increases under the adopted toll structure.

COUNTY	COMMUNITY	NUMBER OF TRACTS BY NUMBER OF PRE-EXISTING POLLUTANT (80TH PERCENTILE) OR CHRONIC DISEASE BURDENS (66.66TH PERCENTILE)			HIGHWAY	FINAL EA SCENARIO E			FINAL EA SCENARIO G			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	FINAL EA SCENARIO G	ADOPTED TOLL STRUCTURE		DAILY NON-TRUCK NO ACTION (AADT)*	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)
Bronx, NY	Fordham–Bronx Park	3	8	8	Bronx River Pkwy	95,415	-17	-0.02%	95,415*	301	0.3%	105,451*	10	0.01%
					Mosholu Pkwy	49,364	183	0.4%	49,364	291	1%	49,364	393	1%
	Kingsbridge–Riverdale**	1	2	1	Bronx River Pkwy	88,312	158	0.2%	88,312	502	1%	88,312	355	0.4%
					Henry Hudson Pkwy	52,188	-2,013	-4%	52,188	-1,338	-3%	52,188	-1,226	-2%
					Major Deegan Expwy	137,804	-2,620	-2%	137,804	-1,650	-1%	138,304	-2,256	-2%
					Mosholu Pkwy	70,125	-631	-1%	70,125	-125	-0.2%	70,125	-210	-0.3%
	Northeast Bronx***	5	4	5	Bronx River Pkwy	88,312	158	0.2%	88,312	502	1%	88,312	355	0.4%
					Hutchinson River Pkwy	139,000	-132	-0.1%	Community does not have tracts with potential traffic increases adjacent to Hutchinson River Pkwy			139,000	90	0.1%
					New England Thruway	114,329	-2,330	-2%	Community does not have tracts with potential traffic increases adjacent to New England Thruway			114,329	-1,963	-2%
	Pelham–Throgs Neck		5	1	Bronx River Pkwy	Community does not have tracts with potential traffic increases adjacent to Bronx River Pkwy			Community does not have tracts with potential traffic increases adjacent to Bronx River Pkwy			51,051	12	0.02%
					Cross Bronx Expwy Ext	All tracts with non-truck traffic increases adjacent to Cross Bronx Expwy Ext also have truck-traffic proximity increases and are included in Table 17.8			67,348	2,945	4%	All tracts with non-truck traffic increases adjacent to Cross Bronx Expwy Ext also have truck-traffic proximity increases and are included in Table 17.8		
Kings, NY	Bensonhurst–Bay Ridge		7	5	Belt Pkwy	Community does not have tracts with potential traffic increases adjacent to Belt Pkwy			102,954*	215	0.2%	108,802*	1,155	1%
					Brooklyn Queens Expwy	Community does not have tracts with potential traffic increases adjacent to Brooklyn Queens Expwy			53,564*	2,128	4%	41,286*	1,472	4%
	Canarsie–Flatlands		2	2	Belt Pkwy	Community does not have tracts with potential traffic increases adjacent to Belt Pkwy			126,307	432	0.3%	126,307	756	1%
	Coney Island–Sheepshead Bay		7	7	Belt Pkwy	Community does not have tracts with potential traffic increases adjacent to Belt Pkwy			118,945	930	1%	118,945	1,124	1%
	East New York	1	1	1	Jackie Robinson Pkwy	87,492	1,440	2%	87,492	538	1%	87,492	1,382	2%
New York, NY	Central Harlem–Morningside Heights†		3	1	Harlem River Dr	Community does not have tracts with potential traffic increases adjacent to Harlem River Dr			122,662	1,037	1%	120,876	-315	-0.3%
	Lower Manhattan	1	1	1	FDR Dr	44,052	5,755	13%	44,052	3,137	7%	44,052	1,364	3%

COUNTY	COMMUNITY	NUMBER OF TRACTS BY NUMBER OF PRE-EXISTING POLLUTANT (80TH PERCENTILE) OR CHRONIC DISEASE BURDENS (66.66TH PERCENTILE)			HIGHWAY	FINAL EA SCENARIO E			FINAL EA SCENARIO G			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	FINAL EA SCENARIO G	ADOPTED TOLL STRUCTURE		DAILY NON-TRUCK NO ACTION (AADT)*	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)
	Union Square–Lower East Side (Lower East Side)	4	4	4	FDR Dr	107,507	7,672	7%	107,507	8,150	8%	107,507	7,609	7%
Queens, NY	Flushing–Clearview	1	2	2	Cross Island Pkwy	110,139	295	0.3%	110,139	282	0.3%	110,139	597	1%
					Whitestone Expwy	Tract with non-truck traffic increases adjacent to Whitestone Expwy also has truck-traffic increases and is included in Table 17D-15			163,532	1,054	1%	163,532	115	0.07%
	Jamaica††	1	2	1	Belt Pkwy	155,884	-617	-0.4%	155,884	-165	-0.1%	Community does not have tracts with potential traffic increases adjacent to Belt Pkwy		
					JFK Expwy	34,513	7	0.02%	34,513	-262	-1%	Community does not have tracts with potential traffic increases adjacent to JFK Expwy		
					Nassau Expwy	66,009	-1,023	-2%	66,009	-977	-1%	Community does not have tracts with potential traffic increases adjacent to Nassau Expwy		
					Van Wyck Expwy	159,528	-138	-0.09%	159,528	751	0.5%	159,528	122	0.08%
	Ridgewood–Forest Hills	2	2	2	Jackie Robinson Pkwy	117,227	553	0.5%	117,227	512	0.4%	117,227	651	1%
	Southeast Queens	2	3	4	Belt Pkwy	157,617	53	0.03%	157,617	583	0.4%	157,617	321	0.2%
					Cross Island Pkwy	136,974	-41	-0.03%	136,974	526	0.4%	125,701	544	0.4%
					Hook Creek Blvd	3,356	26	0.8%	3,356	-19	-1%	3,356	-73	-2%
	Southwest Queens	1	3	2	Belt Pkwy	167,960	-1,855	-1%	167,960	841	1%	167,960	952	1%
					Nassau Expwy	Community does not have tracts with potential traffic increases adjacent to Nassau Expwy			32,379	-910	-3%	32,379	-631	-2%
					Van Wyck Expwy	132,116	534	0.4%	132,116	-535	-0.4%	Tract with non-truck traffic increases adjacent to Van Wyck Expwy also has truck traffic increases, and is included in Table 17D-15		
	West Queens	1	3	3	Grand Central Pkwy	Community does not have tracts with potential traffic increases adjacent to Grand Central Pkwy			109,447	859	1%	109,447	280	0.3%
					Long Island Expwy	184,144	1,108	0.6%	Community does not have tracts with potential traffic increases adjacent to Long Island Expwy			Community does not have tracts with potential traffic increases adjacent to Long Island Expwy		
Bergen, NJ	Fort Lee		2	1	I-95	All tracts with non-truck traffic increases adjacent to I-95 also have truck-traffic proximity increases and are included in Table 17.8			136,411*	9,431	7%	122,339*	5,770	5%
					Palisades Interstate Pkwy	Community does not have tracts with potential traffic increases adjacent to Palisades Interstate Pkwy			64,897	1,616	2%	64,897	1,068	2%
					N Bergen Blvd (US-46)	All tracts with non-truck traffic increases adjacent to N Bergen Blvd (US-46) also have truck-traffic proximity increases and are included in Table 17.8			46,580	3,170	7%	Community does not have tracts with potential traffic increases adjacent to N Bergen Blvd (US-46)		
Essex, NJ	Belleville†††	1		1	McCarter Hwy (NJ Rt 21)	45,515	525	1%	Community does not have tracts with potential traffic increases adjacent to McCarter Hwy (NJ Rt 21)			45,515	821	2%
	East Orange	3	3	3	Garden State Pkwy	108,539	1,296	1%	108,539	1,252	1%	108,539	1,392	1%
					I-280	95,485	-1,958	-2%	95,485	-1,934	-2%	95,485	-1,702	-2%
	Irvington	6	6	6	Garden State Pkwy	121,204	1,475	1%	121,204	1,128	1%	121,204	1,363	1%
	Newark	1	1	2	Garden State Pkwy	128,342	1,279	1%	128,342	1,126	1%	128,342	1,398	1%

COUNTY	COMMUNITY	NUMBER OF TRACTS BY NUMBER OF PRE-EXISTING POLLUTANT (80TH PERCENTILE) OR CHRONIC DISEASE BURDENS (66.66TH PERCENTILE)			HIGHWAY	FINAL EA SCENARIO E			FINAL EA SCENARIO G			ADOPTED TOLL STRUCTURE		
		FINAL EA SCENARIO E	FINAL EA SCENARIO G	ADOPTED TOLL STRUCTURE		DAILY NON-TRUCK NO ACTION (AADT)*	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)	DAILY NON-TRUCK NO ACTION (AADT)	DAILY NON-TRUCK CHANGE (AADT)	DAILY NON-TRUCK CHANGE (%)
					McCarter Hwy (NJ Rt 21)	All tracts with non-truck traffic increases adjacent to McCarter Hwy (NJ Rt 21) also have truck-traffic proximity increases and are included in Table 17.8			42,369	404	1%	42,369	779	2%
Union, NJ	Elizabeth§	2	3	3	I-95	115,637	-1,415	-1%	115,637	-379	-0.3%	115,637	-628	-1%
Nassau, NY	Hempstead	1	2	2	Cross Island Pkwy	141,039	-227	-0.2%	141,039	149	0.1%	141,039	234	0.2%
					Nassau Expwy	64,528	117	0.2%	64,528	6	0.01%	64,528	385	1%

Source: U.S. Census Bureau, ACS 2015-2019 5-Year Estimates; USEPA NATA 2017 and Agency Air Quality System 2018 via EJScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021 and 2023.

Notes:

Results not shown for the following communities because no tracts appeared in these communities with potential non-truck traffic increases but without potential truck-traffic increases under the adopted toll structure: Crotona–Tremont, Bronx County; High Bridge–Morrisania, Bronx County; Sunset Park, Kings County; Downtown–Heights–Slope, Kings County; Washington Heights–Inwood, New York County; Bayside–Little Neck, Queens County; Port Richmond, Richmond County; Hackensack, Bergen County; Palisades Park, Bergen County; Ridgefield, Bergen County; and Jersey City, Hudson County.

* In some cases, specific tracts with potential traffic increases along a certain highway and within a community and differ between Scenario E, Scenario G, and the adopted toll structure. In these cases, the "No Action" AADT will differ because the section of the highway analyzed differs.

** Under Tolling Scenarios E and G, (as noted on Final EA Tables 17D-12 and 17D-13) as well as the adopted toll structure, Census Tract 435, Bronx County is predicted to have an increase in non-truck traffic proximity; though highways passing through the tract are predicted to see net decreases in non-truck traffic, the center of its population is near a portion of a highway where modeling indicates that non-truck traffic could increase.

*** Under Tolling Scenario E (as noted on Final EA Table 17D-12) and the adopted toll structure, Census Tract 302, Bronx County is predicted to have an increase in non-truck traffic proximity under Tolling Scenario E and the adopted toll structure; though highways adjacent to the tract are predicted to see net decreases in non-truck traffic, the center of its population is near a portion of the highway where modeling indicates that non-truck traffic could increase.

† Under the adopted toll structure, Census Tract 243.02, New York County, could see in increase in non-truck traffic proximity, even though AADT is predicted to decrease. Though the highway adjacent to the tract is predicted to see decreases in non-truck traffic, the center of its population is near a portion of the highway where modeling indicates that non-truck traffic could increase.

†† Under Tolling Scenarios E and G (as noted in Final EA Tables 17D-12 and 17D-13), Census Tract 306, Queens County is predicted to have an increase in non-truck traffic proximity; though highways passing through the tract are predicted to see net decreases in non-truck traffic, the center of its population is near a portion of a highway where modeling indicates that non-truck traffic could increase.

††† As noted in Final EA Table 17D-12, under Tolling Scenario E, Tract 144, Essex County has a small potential increase in truck traffic that produces a potential truck-traffic proximity change of less than one truck per meter distance.

§ Under Tolling Scenarios E & G (as noted in Final EA Tables 17D-12 and 17D-13) as well as under the adopted toll structure, non-truck traffic proximity is predicted to increase in these census tracts, even though AADT is predicted to see a net decrease; the centers of population in each of the three tracts are closer to portions of the highway where modeling indicates non-truck traffic proximity could increase.

Regional and Place-Based Mitigation

As noted in the Final EA and above, the Project Sponsors will implement regional and place-based mitigation measures to potential Project-related traffic diversions, related air pollutants, and associated health effects in communities that are already overburdened by pre-existing air pollution and/or chronic diseases, relative to national percentiles. Table 17.13, below, shows the mitigation measures committed to by the Project Sponsors with the funding amounts committed to in the Final EA as well as the funding amounts committed to with the adopted toll structure. As described in the subsection, "Allocation of Place-Based Mitigation Funding by Community," below, target funding allocations for place-based mitigation are determined based on the population of the affected census tracts as a percentage of the overall population of all affected census tracts.

Table 17.13 - Regional and Place-Based Mitigation Measures

MITIGATION MEASURES	BENEFIT AND RESULT OF MITIGATION	RELEVANT LOCATION(S)	IMPLEMENTATION LEAD	FUNDING SOURCE	5-YEAR FUNDING[1]	
					FINAL EA	ADOPTED TOLL STRUCTURE
Regional Mitigation (Measures Benefit "90 or 90" and "90 and 90" Tracts and Communities with Potential Truck Traffic Diversions)						
Further reduced overnight toll	Minimize/avoid truck diversions	10-county environmental justice study area	TBTA	CBD Tolling Program	$30 million	$123 million
Expand NYC Clean Trucks Program	NO_x and $PM_{2.5}$ reductions from ~500 new clean trucks		NYCDOT	CBD Tolling Program	$20 million	$20 million
Expand NYCDOT Off-Hours Delivery Program	Safety and emissions reduction benefits resulting from reduced truck traffic during the day		NYCDOT	CBD Tolling Program	$5 million	$5 million
Place-Based Mitigation (Measures Benefit Tracts along the FDR Drive in Lower Manhattan and Union Square–Lower East Side (Lower East Side) Communities, and "90 and 90" Tracts and Communities with Truck Traffic Diversions)						
Toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then travel southbound on FDR Drive	25 to 35 percent of the non-truck traffic increases on the FDR Drive could be mitigated	FDR Drive between the Brooklyn Bridge and East Houston Street	TBTA	N/A	N/A	N/A
Replacement of Transport Refrigeration Units (TRUs) at Hunts Point Produce Market	Major NO_x and $PM_{2.5}$ reductions from the replacement of up to 1,000 TRUs	Hunts Point	NYCDOT	CBD Tolling Program[2]	$15 million[2]	$15 million[2]
Implement Electric Truck Charging Infrastructure	NO_x and $PM_{2.5}$ reductions from electric vehicles using 35 new chargers (at seven stations)	See "Benefits and Allocation of Funding for Mitigation Measures," below	NYSDOT	$10 million Federal CRP + $10 million CBD Tolling Program	$20 million	$20 million
Install Roadside Vegetation to Improve Near-Road Air Quality	Improves near-road air quality by pollutant capture from ~4,000 trees and ~40,000 shrubs		TBTA with Relevant State and Local Agencies	CBD Tolling Program	$10 million	$10 million
Renovate Parks and Greenspace in Environmental Justice Communities	Increases overall community well-being. 2-5 park/ greenspace renovations depending on size and complexity.		TBTA with Relevant State and Local Agencies	CBD Tolling Program	$25 million	$25 million
Install Air Filtration Units in Schools Near Highways	Removes air pollutants from classrooms. 25-40 schools depending on school size and complexity of existing HVAC system.		TBTA with Relevant State and Local Agencies	CBD Tolling Program	$10 million	$10 million
Establish Asthma Case Management Program and Bronx Center	Reduces hospitalizations and doctor visits, decreases days and nights with symptoms and missed school days – program expansion up to 25 schools		NYC DOHMH	CBD Tolling Program	$20 million	$20 million

Notes:

1 An additional $5 million has been allocated for mitigation and enhancement measures related to monitoring across other topics, along with $82 million for the low-income toll discount. Enhancement measures include air quality monitoring that will expand NYC's existing monitoring network. Locations have been selected in consideration of the traffic and air quality analyses in the Final EA and in coordination with environmental justice stakeholders and relevant state and local agencies. This will complement the regional and place-based mitigation measures related to traffic diversions outlined here.

2 In the Final EA, MTA Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds were identified for replacement of TRUs at Hunts Point Produce Market; the source has changed, but not the amount of funding; after three years, any remaining funds designated for TRU replacements may also be used for clean truck replacement vouchers through the NYC Clean Trucks Program.

Benefits and Allocation of Funding for Mitigation Measures

Benefits of Regional Mitigation Measures

Regionwide, 151 census tracts have been identified for having potential truck traffic proximity increases, and for being in the 90th percentile for at least one pre-existing pollutant burden OR in the 90th percentile for at least one pre-existing chronic disease burden. This is a small fraction of the 2,194 environmental justice-designated census tracts in the 10-county environmental justice local study area and an even smaller fraction of all 3,106 tracts. However, the Final EA committed that these tracts will receive the commitments to regional mitigation measures. Under the adopted toll structure, a total of $148M has been dedicated to these regional mitigation measures. This commitment includes:

- $123M to deeply discount the overnight toll
- $20M to expand the NYC Clean Trucks Program
- $5M to expand the NYCDOT Off-Hours Delivery Program

Discounted Overnight Toll[21]

Modeling for the Final EA indicated that many of the drivers who divert to other routes to avoid the toll would do so in the overnight hours, in part because of the toll rate. The overnight toll rates in the adopted toll structure were reduced beyond the commitment made in the Final EA and for a longer time period (the adopted toll structure includes overnight period toll rates that are 75 percent lower than the respective peak toll rates from 9:00 p.m. to 5:00 a.m. on weekdays and 9:00 p.m. to 9:00 a.m. weekends). The deeply discounted overnight toll would benefit communities along diversion routes, including environmental justice communities, as drivers are less likely to divert due to the discounted rate. Additionally, all drivers entering the CBD during the overnight period would benefit from the lower toll. Specifically, the distribution of drivers into the CBD during the overnight period from each crossing that would benefit from the discounted toll is as follows[22]:

- 39.4 percent from vehicles crossing into the CBD from 60th Street
- 24.3 percent from vehicles crossing into the CBD from Brooklyn
- 18.8 percent from vehicles crossing into the CBD from New Jersey
- 17.5 percent from vehicles crossing into the CBD from Queens

Expansion of NYC Clean Trucks Program

Trucks with more than 70 percent of their VMT in the tri-state (NY/NJ/CT) area are eligible for funding to replace old diesel trucks to lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles. This commitment would result in reduced emissions across the entirety of the replacement trucks' trips, through communities throughout the region, including those environmental justice communities with preexisting burdens that could have increased truck traffic proximity as a result of the adopted toll structure. The NYC Clean Trucks Program has previously funded the conversion of over 600 trucks, which

[21] The adopted toll structure includes an overnight toll discounted beyond the mitigation commitment in the Final EA. The overnight E-ZPass rate is 25 percent of the peak toll rate from 9 p.m. –5 a.m. weekdays and 9 p.m.–9 a.m. weekends.

[22] See Appendix 4A.2, Table 4A.2-3, p. Appendix 4A.2-6

has removed approximately one ton of PM2.5 and 30 tons of NO_x annually.[23] The funding commitment of $20 million would allow for the conversion of approximately 500 more trucks.

Expansion of NYCDOT Off-Hours Delivery Program

NYCDOT will expand its off-hours delivery program to reduce daytime truck traffic, reduce emissions, and increase roadway safety. The Off-Hours Delivery Program focuses on shifting truck deliveries from peak period to off hours (7:00 p.m. to 6:00 a.m.) and can benefit the community by resulting in less congestion as trucks would not travel at the same time as commuters and bus riders, and by reducing emissions as more trucks would be traveling during overnight hours and not sitting in traffic. This program is available to all users and would result in a reduction of truck trips during daytime hours on access routes from any origin.

Allocation of Place-Based Mitigation Funding by Community

The Final EA concluded that specific census tracts that, based on modeling projections, would experience increased or decreased traffic proximity changed depending on the tolling scenario, but that the affected communities remain largely the same. Under the adopted toll structure, the affected census tracts and communities have been identified, confirming that the same communities would be affected as predicted in the Final EA. With the completion of this analysis for the adopted toll structure, as contemplated by the Final EA and FONSI, the Project Sponsors have refined the allocation of place-based mitigation funds as outlined in Final EA Table 17-16, which commits a total of $100M to place-based mitigation measures. This includes:

- $15M for the Replacement of TRUs at Hunts Point Produce Market
- $20M to Implement Electric Truck Charging Infrastructure
- $10M to Install Roadside Vegetation
- $25M to Renovate Parks and Greenspace
- $10M to Install Air Filtration Units in Schools Near Highways
- $20M to Establish an Asthma Case Management Program and Bronx Center

To determine target allocations across communities for the $100M, the share of population in all affected tracts was used, as illustrated in **Table 17.14**.

[23] NYCDOT 2022 analysis of NYC Clean Trucks Program participant data and US EPA's Diesel Emissions Quantifier.

Table 17.14 - Place-Based Mitigation Measures Funding Allocation

COUNTY	COMMUNITY IDENTIFIED FOR PLACE-BASED MITIGATION	TOTAL POPULATION	SHARE OF POPULATION IN ALL AFFECTED TRACTS	ALLOCATED FUNDS
Bronx, NY	Crotona - Tremont	51,133	22.6%	$22.6M
	High Bridge - Morrisania	20,884	9.2%	$9.2M
	Hunts Point - Mott Haven	42,621	18.9%	$18.9M
	Northeast Bronx	9,912	4.4%	$4.4M
	Pelham - Throgs Neck	37,608	16.6%	$16.6M
Kings, NY	Downtown Brooklyn–Fort Greene*	12,819	5.7%	$5.7M
	South Williamsburg**	16,807	7.4%	$7.4M
New York, NY	East Harlem	9,968	4.4%	$4.4M
	Randall's Island***	2,009	0.9%	$0.9M
Bergen, NJ	Fort Lee	3,159	1.4%	$1.4M
Essex, NJ	City of Orange	1,925	0.9%	$0.9M
	East Orange	4,124	1.8%	$1.8M
	Newark	12,982	5.7%	$5.7M

* As noted in Final EA, Appendix D to Appendix 17D, Part of the Downtown–Heights–Slope UHF neighborhood but labelled "Downtown Brooklyn-Fort Greene" to further specify location.

** As noted in Final EA, Appendix D to Appendix 17D, Part of the Greenpoint UHF neighborhood, but labeled as "South Williamsburg" to further specify location.

*** As noted in Final EA, Appendix D to Appendix 17D, part of the East Harlem UHF neighborhood, but labeled as "Randall's Island" to further specify location.

As outlined in the Final EA, several of the six mitigation strategies have been targeted to specific communities or geographic areas, as follows:

- Replacement of TRUs at Hunts Point Market. In the Final EA, the amount allocated for this mitigation measure is $15M; as noted above, this community in the Bronx is eligible for $18.9M of the place-based mitigation funding. Replacement of polluting TRUs at the Hunts Point Produce Market could lead to as much as 21 tons of NO_x and 2.5 tons of $PM_{2.5}$ reduction per year for every 100 TRUs[24]. These reductions are greater in magnitude than the potential additional emissions of these pollutants that the Project could cause in the Bronx as a whole but would most benefit the Hunts Point area.
- Implementation of electric charging infrastructure will be implemented through the Federal Carbon Reduction Program (CRP) using funds received by NYSDOT and will, therefore, be limited to locations in New York. However, given that 4.8 percent of the trucks with destinations in New York City, come from or pass through New Jersey on a daily basis, and 0.2 percent come from or pass through

[24] NYCDOT 2022 analysis of TRUs converted and US EPA's Diesel Emissions Quantifier.

Connecticut.[25] New Jersey and Connecticut communities will benefit from this mitigation, as will New York communities that have truck traffic but where charging stations will not be located. The installation of 35 electric truck chargers at seven stations could lead to a reduction of as much as 32.6 tons of NO_x and 1.54 tons of PM2.5 reduction, city-wide by 2035.[26]

- Expansion of the existing NYC Asthma Care Management Program and a Bronx Asthma Center, which will occur in the Bronx. The expansion of the existing NYC Asthma Case Management Program and a new Bronx Asthma Center would be modeled after NYC DOHMH's East Harlem Asthma Center of Excellence (EHACE). EHACE's counselor program reported outcomes of 50 percent reduction in hospitalizations, a 56 percent decrease in emergency department visits, and a significant decrease in the number of days and nights with asthma symptoms, along with reductions in missed school days related to asthma, for program participants.

All communities are eligible for the remaining three mitigation strategies – installation of roadside vegetation, renovation of parks and greenspace, and installation of air filtration units in schools near highways, pending the identification of feasible sites. Together, the financial commitment for these strategies totals $45M. The installation of roadside vegetation to improve near-road air quality and the renovation of parks and greenspaces would help to improve community well-being and can have multiple other benefits such as reducing air temperatures, reducing stormwater runoff, providing opportunities for exercise, and increasing social interaction. The installation of air filtration units in schools near highways with truck traffic increases would improve indoor air quality in schools, which are sensitive receptor sites.

As outlined in the Final EA, the Project Sponsors will engage with the Environmental Justice Community Group (EJCG), and relevant communities that warrant place-based mitigation, based on the data in this reevaluation. Local implementing agencies will also help determine which of the specific place-based mitigation measures as described above are appropriate for each community within the allocated funds, and exactly where they should be sited.

The siting process will comply with all commitments made in the Final EA, be transparent to interested stakeholders including the general public, press, and elected officials, and ensure the projects are additive (i.e. not already funded and announced work). The specific site selection methodology for place-based mitigation is described below.

1. Analyze Existing Conditions in Communities and Assess Suitability of Mitigation Measures

   For the identified communities, publicly available data relevant to the suitability of each type of place-based mitigation measure will be collected. Preliminary data and information to be collected will depend on the availability of data sets; additional data will be included as identified and appropriate. Additional data may also be collected from other relevant agencies during this step, such as information related to relevant planned and programmed projects.

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25 WSP analysis of BPM No Action truck trip tables, 2024.

26 Estimates from benefit-cost analysis of successful NYC Economic Development Corporation/NYC DOT/NYC Small Business Services USDOT Infrastructure for Rebuilding America grant application for the Hunts Point Terminal Produce Market Intermodal Facility project.

Geospatial analysis will be performed to determine the suitability of each mitigation measure for a given community, as well as consideration of the location of mitigation measures for which the location has been determined (e.g., Hunts Point Produce Market TRUs). For example, in communities where only one mitigation measure is feasible, that mitigation will be sited in that community and the distribution of the remaining mitigation measures will consider this.

2. Engage the Environmental Justice Community Group

   Engage the EJCG to solicit feedback on MTA's approach to the site-selection process. The Project Sponsors will walk through the approach, providing details on what has been done to date. The EJCG will have the opportunity to provide input for the next phase of site selection refinement.

3. Engage with Relevant Agencies to Refine Analysis and Identify Specific Potential Sites

   Meet with relevant agencies to review the initial suitability analysis and identify other factors that may influence site selection, such as implementation approach, needs assessments, and other feasibility factors. Siting could take account of feasible and appropriate sites adjacent to identified communities where the mitigation would benefit the residents of such communities.

4. Refine Analysis and Mapping of Potential Sites and Ensure an Equitable Distribution of Mitigation Measures

   Refine analysis to incorporate feedback from the EJCG and the relevant agencies. Specific potential sites, cost of implementation at those sites, and the funding allotment for each mitigation measure will also be considered in this step, ensuring that the mitigation funding is spread equitably among the communities.

5. Develop and Present Draft Mitigation Plan

   Develop a Draft Mitigation Plan that includes the proposed locations for each mitigation measure as well as the proposed allocated funds for each location. The Draft Mitigation Plan will be presented to relevant agencies, the EJCG, local officials, and other relevant community stakeholders for review and comment.

6. Finalize Mitigation Plan

   A Final Mitigation Plan will be prepared that reflects feedback received on the Draft Mitigation Plan. This plan will be used as the roadmap for developing and finalizing Memoranda of Understanding (MOUs) and funding agreements with the Project Sponsors and other agencies. As work progresses, if there are impediments to proceeding with a given site, data and analysis from this process will be revisited and potential alternative sites will be identified using a similar process.

FINDINGS

The Final EA considered the effects of the Project on environmental justice populations, including local neighborhood effects and regional effects related to mobility and changes in travel patterns. The Final EA included analysis of Project effects related to increases or decreases in traffic and non-truck traffic as a result of traffic diversions in communities already highly burdened by pre-existing air pollution and chronic

diseases. For the reevaluation, the Project Sponsors considered the effects of the adopted toll structure for these same topics, using results from the BPM incorporating the adopted toll structure.

Low-Income Drivers

The Final EA concluded that the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers who currently drive to the Manhattan CBD and do not have reasonable alternative transportation modes available, because the cost of the toll would consume a larger percentage of their available income. As a result, the Project Sponsors committed to a program of mitigation measures for low-income frequent drivers, including a 25 percent discount after 10 trips to the CBD for the first five years of the Program. The adopted toll structure includes passenger toll rates within the range evaluated in the Final EA and enhances the mitigation commitments by offering a 50 percent discount off the peak hour toll after 10 trips per month for low-income drivers, giving a deeper discount than committed to in the Final EA.[27] The conclusions in the Final EA/FONSI are still valid.

Minority Taxi and FHV Drivers

The Final EA/FONSI concluded that taxi and FHVs would be adversely affected by the cost of the toll if tolled more than once per day and the reduction of VMT associated with taxis and/or FHVs in Manhattan due to the cost of the toll and income loss leading to losses in employment because the income of taxi and FHV drivers is directly related to the miles they travel with paying customers.

The mitigation commitment in the Final EA/ FONSI was to implement a toll structure where taxis and FHVs would not be charged more than once per day. With the adopted toll structure, taxi and FHVs would be tolled for each trip entering, leaving, and within the CBD made with passengers. The base toll for taxis (including yellow taxis, green cabs, and FHVs other than high-volume FHVs) would be $1.25 per trip with paying passengers for trips to, within, or from the Manhattan CBD; for high-volume FHVs, the base toll would be $2.50 per trip with paying passengers for trips to, within, or from the Manhattan CBD. Based on a TLC analysis of trips made by TLC-licensed vehicles in May 2023, the average number of taxi and FHV trips to, within, and from the Manhattan CBD is 12 and 6, respectively. Thus, this rate is consistent with the Project Sponsors' commitment to incorporate a toll of no more than once per day for taxis and FHVs in the adopted toll structure, and falls within the range of daily peak toll rates evaluated in the Final EA and determined not to have an adverse effect on either drivers or the industry, which was from $9 to $23 in the different tolling scenarios. This limits the reduction in taxi and FHV VMT in the Manhattan CBD to within the range of the Final EA/FONSI for which no adverse effect was identified and allows the cost of the toll to be paid by the passenger.

[27] In the Final EA, the Project Sponsors committed $47.5 million over 5 years for Low-Income Discount Plan for low-income frequent drivers; with the adopted toll structure, the Project Sponsors will commit $82 million over 5 years to the deeper discount.

Truck Traffic Proximity Effects

With the adopted toll structure, there would be four additional highly burdened census tracts not identified in the Final EA/FONSI that would have a potential increase in truck traffic proximity and six tracts that were identified in the Final EA/FONSI for potential truck traffic proximity increases that were not identified in the adopted toll structure. The proximity effects under the adopted toll structure are much lower than the Final EA. The effects associated with truck traffic proximity for the "90 and 90 "environmental justice census tracts would all decrease and be within the range identified in the Final EA. Similarly, effects associated with the "90 or 90" environmental justice census tracts would decrease and be within the range identified in the Final EA. The mitigation has been refined based on the effects of the adopted toll structure and is consistent with what was identified in the Final EA/FONSI.

Non-Truck Traffic Proximity Effects

Under the adopted toll structure, increases or decreases in non-truck AADT on highways adjacent to environmental justice communities would be within the range identified in the Final EA for Scenarios E and G except at 15 locations. At locations with AADT increases not identified in the Final EA, the increases are 2 percent or less. These changes are small considering the AADT on these facilities. The proximity effects are below what was identified in the Final EA/FONSI.

The reevaluation concludes that with the implementation of the mitigation commitments of the Final EA and FONSI, the adopted toll structure would not result in disproportionately high and adverse effects on environmental justice populations or communities and no new mitigation is needed. Although there were changes in specific tracts that would experience truck proximity effects, the communities identified for mitigation remain the same as reported in the Final EA/FONSI. There is no change in the communities for which place-based mitigation will be implemented. The conclusions of the Final EA with respect to environmental justice remain valid.

Table 17.15 presents information from the Final EA Table ES-5 summarizing the conclusions related to environmental justice, now modified to include the adopted toll structure.

Table 17.15 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
17 – Environmental Justice	Low-income drivers	The EA as published in August 2022 found the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have a reasonable alternative for reaching the Manhattan CBD. With further analysis of the population affected and the addition of new mitigation, the Final EA concludes there would not be a disproportionately high and adverse effect on low-income drivers.	28-county study area	Narrative	The increased cost to drivers would occur under all tolling scenarios.							Yes	**Mitigation needed.** The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than $60,000. TBTA will coordinate with the NYS DTF to ensure availability of documentation needed for drivers eligible for the NYS tax credit. TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit. TBTA will eliminate the $10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access. TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-loaded balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware. TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware. The Project Sponsors commit to establishing an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting taking place prior to Project implementation, to share updated data and analysis and hear about potential concerns. As it relates to environmental justice, the Project Sponsors will continue providing meaningful opportunities for participation and engagement by sharing updated data and analysis, listening to concerns, and seeking feedback on the toll setting process. TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will benefit low-income drivers who travel during that time. For five years, TBTA commits to a Low-Income Discount Plan for low-income frequent drivers who will benefit from a 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted). **Enhancement** TBTA will coordinate with MTA NYCT to improve bus service in areas identified in the EA as the Brooklyn and Manhattan Bus Network Redesigns move forward.	Incorporating the identified mitigation, no disproportionately high and adverse effect would occur on low-income drivers.	Yes	No change in identified mitigation needed. The adopted toll structure incorporates and expands the mitigation commitments of the Final EA and FONSI. The adopted toll structure includes an overnight toll for trucks and other vehicles at 25 percent of the peak toll from 9 p.m. to 5 a.m. on weekdays and 9 p.m. to 9 a.m. on weekends. The adopted toll structure commits for five years to a Low-Income Discount Plan for low-income frequent drivers who will benefit from a 50 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted).

Table 17.15 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure Added

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
17 – Environmental Justice	Taxi and FHV drivers*	The EA as published in August 2022 found a potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new CBD toll and the reduction of VMT for taxis and FHVs, which would result in a decrease in revenues that could lead to losses in employment. With the addition of new mitigation, the Final EA concludes there would not be a disproportionately high and adverse effect on taxi and FHV drivers.	New York City	Narrative	Potential adverse effect would occur in Tolling Scenarios A, D, and G, which would not have caps or exemptions for taxis and FHV drivers.							Yes	**Mitigation needed.** TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final CBD toll structure.	No disproportionately high and adverse effect would occur on New York City taxi and FHV drivers with the adopted toll structure, which includes a per-trip toll on trips to, within, or from the CBD of $1.25 for taxis and $2.50 for FHVs. These per-trip tolls are equivalent to the once per day toll for passenger vehicles included as part of the adopted toll structure.	No	Based on the average number of trips taxis and FHVs make each day, the toll amount for taxis and FHVs is equivalent to the once-daily toll rate for automobiles. In addition, the adopted toll structure requires the cost of the toll to be paid by the passenger rather than the taxi or FHV driver.
				Change in daily taxi/FHV VMT with passengers in the CBD relative to No Action Alternative: Scenarios included in EA	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)			-904 (-0.3%)		
				Net change in daily taxi/FHV trips to CBD relative to scenarios included in EA: Additional analysis to assess effects of caps or exemptions	Tolls capped at 1x / Day: +2%	—	—	Tolls capped at 1x / Day: +3% Exempt: +50%	—	—	Tolls capped at 1x / Day: +2%			NA		

Note:

* The Final EA provides information on the types of vehicles licensed by the New York City Taxi and Limousine Commission (TLC) in Chapter 6, "Economic Conditions," Section 6.3.2.6, on page 6-32. These include yellow cabs, for which TLC has issued medallions; green cabs, which are street-hail livery cabs that begin their trips outside the core service area of Manhattan; and FHVs, which provide pre-arranged service. Vehicles licensed as app-based, or high-volume, FHVs operate from bases that dispatch more than 10,000 trips a day. (https://www.nyc.gov/site/tlc/businesses/high-volume-for-hire-services.page). Currently there are two TLC-licensed high-volume FHVs: Lyft and Uber. In this reevaluation document and the Final EA, the term "taxi" is used to refer to yellow cabs, green cabs, and FHVs that are not high-volume FHVs and the term "FHV" refers to app-based, high-volume FHVs (i.e., Lyft and Uber)

Table 17.15 - Modified Final EA Table ES-5. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios – with the Adopted Toll Structure

EA CHAPTER	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	FINAL EA TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	ADOPTED TOLL STRUCTURE	POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G					
17 – Environmental Justice (Cont'd)	Increases or decreases in traffic, as a result of traffic diversions, in communities already overburdened by pre-existing air pollution and chronic diseases	Certain environmental justice communities would benefit from decreased traffic; some communities that are already overburdened by pre-existing air pollution and chronic diseases could see an adverse effect as a result of increased traffic.	The specific census tracts that would experience increased or decreased traffic change slightly depending on the tolling scenario. The following communities could have census tracts that merit place-based mitigation: High Bridge–Morrisania, Crotona–Tremont, Hunts Point–Mott Haven, Pelham–Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Lower East Side/Lower Manhattan, Downtown Brooklyn–Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee.	Narrative	Census tracts with pre-existing air pollutant and chronic disease burdens that would benefit from reduced traffic, and those affected by increased traffic would vary somewhat, but the identified communities remain largely the same across tolling scenarios. Under Tolling Scenario G, Fort Lee would not experience increases.							Yes	**Mitigation needed.** **<u>Regional Mitigation</u>** TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final toll structure; this will reduce truck diversions. YCDOT will expand the NYC Clean Trucks Program to accelerate the replacement of eligible diesel trucks, which travel on highways in certain environmental justice communities where the Project is projected to increase truck traffic, to lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles. YCDOT will expand its off-hours delivery program in locations where the Project is projected to increase truck diversions to reduce daytime truck traffic and increase roadway safety in certain environmental justice communities. **<u>Place-based Mitigation</u>** TBTA will toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then turn to immediately travel south on FDR Drive; this ill mitigate modeled non-truck traffic increases on the FDR Drive between the Brooklyn Bridge and East Houston Street. YCDOT will coordinate to replace diesel-burning TRUs at Hunts Point with cleaner vehicles. YSDOT will coordinate to expand electric truck charging infrastructure. The Project Sponsors will coordinate to install roadside vegetation to improve near-road air quality. The Project Sponsors will renovate parks and greenspaces. The Project Sponsors will install or upgrade air filtration units in schools. The Project Sponsors will coordinate to expand existing asthma case management programs and create new community-based asthma programming through a neighborhood asthma center in the Bronx.	Census tracts with pre-existing air pollutant and chronic disease burdens that would benefit from reduced traffic, and those affected by increased traffic vary somewhat from the Final EA, as anticipated. The communities that merit place-based mitigation remain the same as those identified in the Final EA and of the $100m committed in place-based mitigation funds, target allocations have been made for each community as follows: Crotona–Tremont, $22.6m; High Bridge–Morrisania, $9.2m; Hunts Point–Mott Haven, $18.9m; Northeast Bronx, $4.4m; Pelham–Throgs Neck, $16.6m; Downtown–Heights–Slope (Downtown Brooklyn–Fort Greene), $5.7m; Greenpoint (South Williamsburg), $7.4m; East Harlem, $4.4m; Randall's Island, $0.9m; Fort Lee, $1.4m; City of Orange, $0.9m; East Orange, $1.8m; and Newark, $5.7M. (See Note 1.). TBTA's place-based mitigation for Union Square - Lower East Side (Lower East Side) has no associated cost.	Yes	**No additional mitigation needed.** The Project Sponsors will implement the mitigation commitments of the Final EA and FONSI (listed under "Mitigation and Enhancements" in this table).

Note:

1 Based on analysis of the adopted toll structure, communities and census tracts where place-based mitigation measures will be implemented have been confirmed – the specific siting of mitigation measures is being determined through analysis of data on needs and feasibility and coordination among the Project Sponsors, the Environmental Justice Community Group (representing the 10-county environmental justice study area), and relevant stakeholders and implementing agencies; see "Benefits and Allocation of Funding for Mitigation Measures," above.

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

18 Agency Coordination and Public Participation

Chapter 18 of the Final EA described agency coordination and public participation activities for the Project. This section of the reevaluation describes the agency coordination and public participation activities following the Final EA, including outreach already conducted and coordination that will continue following completion of this reevaluation.

FINAL EA AND FONSI COMMITMENTS

The FONSI included commitments related to ongoing engagement and coordination. The following describes progress on those commitments.

Small Business Working Group

In the Final EA (see page 6-69 in Chapter 6), the Project Sponsors committed to establishing a Small Business Working Group. The purpose of this group is to share information about implementation of the Project and findings from evaluating the effects of the Project, and to solicit ongoing input on how small businesses are being affected. Actions related to this commitment have already begun; the first meeting of this group was held virtually on January 22, 2024.

The Project Sponsors invited representatives from business organizations and business improvement districts (BIDs) operating in and near the Manhattan CBD to participate in the Small Business Working Group, and representatives from 21 organizations attended the first meeting in January 2024. Table 18.1 shows the groups invited to attend and those with representatives who attended. In this initial meeting, the Project Sponsors presented an overview of the Project, the proposed toll structure, and information on the Project's benefits and potential effects on businesses in the Manhattan CBD. After the presentation, the meeting included a discussion in which participants asked questions and raised concerns. Comments and concerns predominantly related to the need for ongoing communication with small business owners and the effect of congestion pricing on residents of the CBD.

As committed to, the second meeting of the Small Business Working Group will be held six months after Project implementation, and additional meetings will be held annually thereafter.

Table 18.1 – Small Business Working Group Invitations and Attendance at January 2024 Meeting

GROUP INVITED TO ATTEND	ATTENDANCE	GROUP INVITED TO ATTEND	ATTENDANCE
34th Street Partnership	Attended	Lincoln Square BID	Attended
47th Street BID (Diamond District Partnership)	Invited	Lower East Side BID	Attended
Alliance for Downtown New York	Attended	Manhattan Chamber of Commerce	Attended
Bryant Park Corporation	Attended	Madison Avenue BID	Attended
Chinatown BID	Attended	Meatpacking District BID	Attended
East Midtown Partnership	Attended	NoHo NY BID	Attended
Fifth Avenue Association	Attended	SoHo Broadway Initiative	Attended
Flatiron NoMad Partnership	Attended	Times Square Alliance	Attended
Garment District Alliance	Attended	Union Square Partnership	Attended
Grand Central Partnership	Attended	Village Alliance	Attended
Hudson Square BID	Attended	West Village BID	Invited
Hudson Yards Hell's Kitchen Alliance	Attended		

Environmental Justice Community Group

In the Final EA (see page 17-71 and Table 17-18, page 17-78 in Chapter 17), the Project Sponsors committed to establishing an Environmental Justice Community Group to share updated data and analysis and hear about potential environmental justice-related concerns. The Project Sponsors have initiated this commitment; first meeting of this group was held virtually on February 22, 2024.

To form the new Environmental Justice Community Group, the Project Sponsors invited members of the Environmental Justice Technical Advisory Group established during the National Environmental Policy Act (NEPA) process as well as representatives of additional environmental justice organizations to join the new group. (As described in Chapter 17 of the Final EA, Section 17.9.2 on page 17-84, the Environmental Justice Technical Advisory Group consisted of community leaders, advocacy groups, industry groups, and community members from the regional study area with expertise in environmental justice considerations, with 16 groups represented.) Table 18.2 shows the groups invited to attend the first Environmental Justice Community Group meeting and those with representatives who attended.

As shown in Table 18.2, representatives from 12 organizations attended the first meeting in February 2024. At that meeting, the Project Sponsors presented an overview of the Project, the proposed toll structure, a history of environmental engagement for the Project to date, the mitigation commitments made during the NEPA process and the commitments to environmental justice communities, and a timeline for future actions. After the presentation, the meeting included a discussion in which participants asked questions and raised concerns. Comments and concerns predominantly related to potential traffic diversions, place-based mitigation, and future capital projects.

Table 18.2 – Environmental Justice Community Group Invitations and Attendance at February 2024 Meeting

GROUP INVITED TO ATTEND	ATTENDANCE	GROUP INVITED TO ATTEND	ATTENDANCE
ALIGN	Invited	New York City Environmental Justice Alliance	Attended
American Indian Community House	Invited	New York Urban League	Invited
Asian American Federation	Attended	Northern New Jersey Community Foundation	Attended
Chhaya	Invited	The Point Community Development Corporation	Attended
Community Voices Heard	Invited; Declined	Riders Alliance	Invited
El Puente	Attended	South Bronx Unite	Attended
ERASE Racism New York	Attended	South Ward Environmental Alliance	Invited
GOLES (Good Old Lower East Side)	Attended	Staten Island Urban Center	Attended
Hispanic Federation	Invited	United Jewish Organizations of Williamsburg and North Brooklyn	Attended
The HOPE Program (formerly Sustainable South Bronx)	Invited	UPROSE	Attended
Ironbound Community Corporation	Invited; Declined	Urban Indigenous Collective	Invited
Make the Road New York	Invited	Urban League of Bergen County	Invited
National Association for the Advancement of Colored People (NAACP) – Long Island Region	Invited	Urban League of Essex County	Invited
NAACP – Metropolitan Council Region, NY	Invited	Urban League of Hudson County	Invited
NAACP – NJ State Conference	Invited	Urban League of Union County	Attended
National Action Network	Invited	WE ACT for Environmental Justice	Invited
Neighborhood Initiatives Development Corporation	Invited	WE STAY / Nos Quedamos	Invited
New Jersey Environmental Justice Alliance	Invited	Youth Ministries for Peace and Justice	Invited

As committed to in the Final EA and FONSI, the Project Sponsors will continue coordination and meetings with the Environmental Justice Community Group on a quarterly basis.

Other Outreach Related to Environmental Justice Commitments

In addition to the Environmental Justice Community Group, the Final EA and FONSI also described that the Project Sponsors will continue providing meaningful opportunities for participation and engagement related to the concerns of environmental justice communities by sharing updated data and analysis and listening to concerns. In addition, as described in Section 17 of this reevaluation, the Project Sponsors will conduct additional coordination with the Environmental Justice Community Group and the relevant communities receiving place-based mitigation related to environmental justice concerns.

Education/Outreach on Discounted Transportation Options

The Final EA described TBTA's commitment to conduct enhanced outreach related to discounts and low-cost options for transit fares and tolls (see pages 17-71 and 17-78 in Chapter 17). This included the following:

- Education/outreach/coordination on the tax credit available for low-income residents of the Manhattan CBD
- Enhanced promotion of existing E-ZPass payment and plan options
- Education and outreach on existing discounted transit fare products and programs

TBTA is developing multiple tools for implementing the enhanced outreach commitments described in the Final EA, which will include both in-person and digital outreach methods. This includes outreach through TBTA's extensive network of E-ZPass customers and in-person distribution of information throughout MTA's service area and beyond to share information and awareness.

Other outreach efforts have already begun. Between March 28 and April 7, 2024, TBTA staffed a table at the NYC International Auto Show to provide information on existing E-ZPass payment and plan options, as well as the elimination of the $10 E-ZPass tag deposit fee for customers without credit card backup. Additionally, since the week of April 14, 2024, TBTA and MTA staff have held 2 to 3 in-person engagement events per week at transit centers across all five boroughs of New York City. At these events, staff educated customers about Fair Fares, the exemption and discount plans, and E-ZPass. These events, as well as others not in transit centers, will continue into the summer.

Ongoing Coordination Related to Construction

The Final EA described the Project Sponsors' commitments related to coordination during construction (see Section 18.3.5 on page 18-8 in Chapter 18). The commitment included developing and implementing a specific construction communications plan and implement it to inform affected road users, area residences and businesses, appropriate agencies, and the public about anticipated construction activities, including their schedule and duration, and any potential roadway or lane closures, sidewalk closures or other impacts to pedestrians, commuter alternatives, and any potential temporary impacts on traffic during construction.

Construction for the Project began in July 2023. Prior to the start of construction, on July 12, 2023, the Project Sponsors presented a construction briefing to affected community boards, business improvement districts, and elected officials. Once construction began, the Project Sponsors sent weekly construction bulletins to the same group describing planned work sites, the duration and scope of the work, and any potential temporary traffic impacts. In addition, the Project Sponsors held targeted meetings with members of the public related to construction activities, related impacts to business operations and potential aesthetic changes to the infrastructure. The Project contractor maintained an outreach email address and phone line to field comments and concerns during construction.

OTHER OUTREACH AND COORDINATION

In addition to these commitments, as part of the larger effort to educate the public and conduct outreach, TBTA has, upon invitation, participated in the following public meetings, where representatives provided an overview of the Project and answered questions from event organizers and attendees:

- Waterside Plaza Tenants Association and local elected officials on October 18, 2023
- Manhattan Community Board 3 Transportation Committee on November 14, 2023
- Hotel Association of New York to address concerns specific to the industry on January 22, 2024
- Brooklyn Community Board 7 Transportation Committee on January 29, 2024
- Manhattan Community Board 6 Transportation Committee on February 5, 2024
- Lower East Side Congestion Pricing Town Hall with elected officials on February 8, 2024
- Tribeca Congestion Pricing Town Hall with elected officials on February 15, 2024
- Interested students from Queens College, City University of New York, on February 27, 2024
- New York City Small Business Services Small Business Advisory Group, in March 2024

19 Section 4(f) Evaluation

Chapter 19 of the Final EA presented FHWA's Final Section 4(f) Evaluation for the CBD Tolling Program, conducted in compliance with Section 4(f) of the Department of Transportation Act of 1966 (now 49 USC Section 303 and 23 USC Section 138; U.S. Department of Transportation [USDOT] Act). As described there, the Section 4(f) Evaluation considered the Project's potential Section 4(f) use, as defined by Section 4(f), of historic sites and publicly owned parks related to installation of new tolling infrastructure and tolling system equipment, including new signage.

The Final EA presented FHWA's findings that the CBD Tolling Alternative would not result in a use of Section 4(f) properties except for the High Line and Central Park. Following consideration of public input received during the public comment period, FHWA concluded the CBD Tolling Alternative would have a *de minimis* impact on the High Line and Central Park.

The adopted toll structure would use the same tolling system equipment and infrastructure described and evaluated in the Final EA and Final Section 4(f) Evaluation. Consequently, the conclusions of the Final EA with respect to Section 4(f) remain valid and no further analysis is needed.

FINDINGS

After consideration of the effects of the proposed construction activities and permanent installation of tolling infrastructure and tolling system equipment, FHWA concluded that the CBD Tolling Alternative would not result in a use of Section 4(f) properties except for the High Line and Central Park, and that the Project would have a *de minimis* impact on the High Line and Central Park. The adopted toll structure would have the same construction activities and the same tolling infrastructure and tolling system equipment described and evaluated in the Final EA. Consequently, the conclusions of the Final EA related to Section 4(f) remain valid.

Other Analyses: Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity (EA Chapter 20), Irreversible and Irretrievable Commitment of Resources (EA Chapter 21)

The two chapters represented here—short-term uses of the environment and maintenance and enhancement of long-term productivity, and irreversible and irretrievable commitment of resources—describe the temporary effects during construction in relation to the long-term benefits of the Project and the resources that must be committed to achieve the Project. The adopted toll structure will use the same tolling infrastructure and tolling system equipment described and evaluated in the Final EA, and therefore the short-term effects during construction and resources that must be committed remain unchanged. With the adopted toll structure, the Project benefits are consistent with those described in the Final EA, including reduced vehicular congestion in the Manhattan CBD, improved regional air quality, and creation of a new local, recurring funding source for MTA capital projects. Consequently, the conclusions of the Final EA for these analysis areas remain valid and no further analysis is needed.

Conclusion

Based on the analysis above, the effects associated with the adopted toll structure fall within the range of effects and analysis presented in the Final EA/FONSI except in the areas identified in the discussion. The deviations in effects noted in the reevaluation analyses associated with the adopted toll structure that are not within the range of the effects reported in the Final EA/FONSI are minor and do not require additional environmental analysis and mitigation. The Final EA/FONSI anticipated there would be variations in the potential effects once the toll structure was adopted and since these variations are very minor, they continue to fall within the parameters of the Final EA/FONSI. The mitigation measures identified in the Final EA/FONSI are still applicable and will ensure that the adopted toll structure does not result in significant effects. With the adopted toll structure, and an understanding of the effects, the place-based mitigation will be finalized in concert with stakeholder involvement.

Therefore, additional NEPA studies are not warranted.

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Federal Highway Administration

New York Division

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June 14, 2024

In Reply Refer To:
HDA-NY

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Subject: New York City Central Business District Tolling Program – Re-Evaluation

Dear Dr. C de Cerreño, Ms. Winkelhake, and Mr. Beaton:

The Federal Highway Administration (FHWA) received your correspondence dated May 23, 2024, requesting review and approval of the *Re-Evaluation* for the Central Business District Tolling Program (CBDTP). FHWA also acknowledges your correspondence dated June 13, 2024, asking FHWA to proceed with the next step in the process under the National Environmental Policy Act and complete the on-going re-evaluation in light of the pause of the CBDTP's planned June 30 launch announced by Governor Hochul last week.

The Re-Evaluation was prepared consistent with 23 C.F.R. §771.129 and assessed the effects of the tolling structure adopted by the Triborough Bridge and Tunnel Authority Board to determine whether the effects are consistent with those disclosed in the April 2023 Final Environmental Assessment and whether the mitigation set forth in the June 2023 Finding of No Significant Impact is still valid.

The FHWA worked collaboratively with the New York project sponsors in completing the *Re-Evaluation.* FHWA concludes that the analysis conducted in the Re-Evaluation confirms that the

adopted toll structure and impacts associated with it was analyzed and mitigated accordingly. Thus, FHWA finds that no additional environmental analysis is warranted. The conclusions in the Final Environmental Assessment and Finding of No Significant Impact remains valid.

As previously discussed, please post this letter along with all of the *Re-Evaluation* documents on the project web site maintained by the Metropolitan Transportation Authority as soon as possible.

Sincerely,

RICHARD JOSEPH MARQUIS

Digitally signed by RICHARD JOSEPH MARQUIS
Date: 2024.06.14 08:01:35 -04'00'

Richard J. Marquis
Division Administrator

Downtown Brooklyn Study Area - With-Action - AM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Flatbush Avenue and Tillary Street	NB	NBL	L	L	570	1.17	146.1	F	~256	#420
			NBT	T	T	947	1.21	137.8	F	~516	#585
			NBR	R	R	259	0.46	4.7	A	-	35
		SB	SBT	T	T	631	0.64	40.7	D	176	219
			SBR	R	R	79	0.30	37.4	D	52	99
		EB	EBL	L	L	143	0.93	99.9	F	137	#234
			EBT	T	T	618	0.84	49.1	D	280	326
			EBR	R	R	230	0.86	65.1	E	194	#322
		WB	WBL	L	L	230	0.77	64.9	E	105	#145
			WBT	T	T	368	0.80	48.0	D	215	291
			WBR	R	R	371	0.92	79.2	E	194	#368
		Intersection						80.3	F		
2	Adams Street and Tillary Street	NB	NBL	L	L	0	-	-	-	-	-
			NBT	T	T	617	0.83	48.7	D	272	328
			NBR	T	R	59	0.70	50.3	D	158	#259
			NBR2	R	R2	150	-	-	-	-	-
		SB	SBL	L	L	624	0.90	56.7	E	285	#336
			SBT	T	T	854	0.63	23.6	C	270	340
			SBR	R	R	15	0.03	8.5	A	5	13
		EB	EBL	L	L	0	-	-	-	-	-
			EBT	T	T	196	0.35	36.9	D	75	105
			EBR	R	R	90	-	-	-	-	-
		WB	WBL	L	L	138	0.80	70.9	E	115	#223
			WBT	T	T	227	0.35	37.2	D	86	121
			WBR	R	R	0	-	-	-	-	-
			WBR2	R	R2	27	0.07	32.2	C	16	41
		Intersection						42.3	D		
3	Old Fulton Street and Vine Street	NB	NBL	L	L	1139	1.00	54.2	D	~344	#495
			NBT	T	T	178	0.34	20.1	C	81	124
		SB	SBT	T	T	654	0.56	62.3	E	126	m8
		Intersection						53.7	D		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Downtown Brooklyn Study Area - With-Action - LN Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Flatbush Avenue and Tillary Street	NB	NBL	L	L	465	1.12	132.5	F	~191	#355
			NBT	T	T	562	1.07dl	32.7	C	183	227
			NBR	R	R	405	0.52	6.8	A	32	113
		SB	SBT	T	T	713	0.65	40.8	D	204	242
			SBR	R	R	44	0.15	33.8	C	31	58
		EB	EBL	L	L	78	0.43	54.8	D	57	110
			EBT	T	T	555	0.70	41.5	D	237	280
			EBR	R	R	160	0.49	38.9	D	122	178
		WB	WBL	L	L	243	0.68	58.2	E	103	150
			WBT	T	T	399	0.59	38.4	D	180	218
			WBR	R	R	187	0.59	43.5	D	147	213
		Intersection						42.4	D		
2	Adams Street and Tillary Street	NB	NBL	L	L	0	-	-	-	-	-
			NBT	T	T	475	0.59	39.1	D	174	233
			NBR	T	R	44	0.40	37.0	D	98	144
			NBR2	R	R2	86	-	-	-	-	-
		SB	SBL	L	L	427	0.62	41.4	D	178	214
			SBT	T	T	712	0.54	21.7	C	224	261
			SBR	R	R	0	-	-	-	-	-
		EB	EBL	L	L	0	-	-	-	-	-
			EBT	T	T	115	0.16	34.1	C	38	59
			EBR	R	R	45	-	-	-	-	-
		WB	WBL	L	L	110	0.51	45.3	D	88	138
			WBT	T	T	114	0.18	34.6	C	44	64
			WBR	R	R	0	-	-	-	-	-
			WBR2	R	R2	24	0.06	33.5	C	14	37
		Intersection						33.3	C		
3	Old Fulton Street and Vine Street	NB	NBL	L	L	1265	0.84	26.8	C	442	541
			NBT	T	T	137	0.18	12.7	B	55	86
		SB	SBT	T	T	284	0.33	13.8	B	16	m20
		Intersection						23.3	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Little Dominican Republic Area - With Action - AM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	W 179th St & Broadway	NB	NBL	L	L	55	0.15	11.1	B	16	33
			NBT	T	T	210	0.18	10.3	B	31	50
		SB	SBT	T	T	220	0.44	23.0	C	80	107
			SBR	TR	R	80	-	-	-	-	-
		WB	WBL	TR	L	45	-	-	-	-	-
			WBT		T	163	0.75	41.8	D	144	#269
			WBR		R	50	-	-	-	-	-
		Intersection						24.8	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Little Dominican Republic Area - With Action - MD Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	W 179th St & Broadway	NB	NBL	L	L	140	0.36	15.6	B	44	78
			NBT	T	T	330	0.25	11.4	B	54	80
		SB	SBT	T	T	220	0.44	24.1	C	82	120
			SBR	TR	R	105	-	-	-	-	-
		WB	WBL	TR	L	40	-	-	-	-	-
			WBT		T	257	0.88	50.9	D	213	#362
			WBR		R	50	-	-	-	-	-
		Intersection						27.9	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Little Dominican Republic Area - With Action - PM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	W 179th St & Broadway	NB	NBL	L	L	135	0.30	14.1	B	39	71
			NBT	T	T	340	0.27	11.6	B	57	82
		SB	SBT	T	T	230	0.41	23.7	C	80	120
			SBR	TR	R	100	-	-	-	-	-
		WB	WBL	TR	L	35	-	-	-	-	-
			WBT		T	244	0.80	41.6	D	193	#339
			WBR		R	60	-	-	-	-	-
		Intersection						24.3	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Lower East Side Study Area - With Action - AM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Park Row/Chatham Square & Worth/Oliver St & Mott St	NB	NBL	LT	L	10	-	-	-	-	-
			NBT		T	355	0.76	39.1	D	197	#331
			NBR2	R	R2	154	0.42	28.8	C	85	129
		SB	SBL	T	T	75	0.69	66.7	E	46	#106
			SBT	TR	T	50	0.15	23.6	C	28	58
			SBR		R	10	-	-	-	-	-
		EB	EBT	TR	T	20	0.09	22.0	C	15	33
			EBR		R	10	-	-	-	-	-
		WB	WBL	L	L	105	0.36	30.1	C	74	119
			WBT	T	T	15	0.25	23.8	C	43	70
			WBR	TR	R	140	-	-	-	-	-
		SWB	SWL2	LR	L2	55	-	-	-	-	-
			SWL		L	0	0.24	33.0	C	33	62
			SWR		R	0	-	-	-	-	-
		Intersection						34.4	C		
2	Chatham Square & E Broadway	NB	NBL	L	L	95	0.20	16.4	B	39	66
			NBR	R	R	30	0.07	14.9	B	12	26
		EB	EBT	T	T	169	0.16	18.4	B	51	m76
			EBR	R	R	135	0.29	56.9	E	89	m138
		WB	WBL	L	L	120	0.35	12.1	B	47	74
			WBT	T	T	165	0.16	7.0	A	32	44
		Intersection						21.7	C		
3	Chatham Square/Bowery & Divison St	NB	NBL	L	L	140	0.58	41.5	D	90	138
			NBR	T	T	250	0.55	19.8	B	110	171
		EB	EBT	T	T	194	0.24	6.1	A	12	18
			EBR2	TR	R2	5	-	-	-	-	-
		WB	WBL	LT	L	5	-	-	-	-	-
			WBT	T	T	145	0.18	19.4	B	31	54
		Intersection						20.5	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Lower East Side Study Area - With Action - MD Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Park Row/Chatham Square & Worth/Oliver St & Mott St	NB	NBL	LT	L	10	-	-	-	-	-
			NBT		T	215	0.49	29.3	C	113	186
			NBR2	R	R2	154	0.42	28.9	C	85	129
		SB	SBL	T	T	145	0.75	65.5	E	90	#167
			SBT	TR	T	75	0.22	24.6	C	40	79
			SBR		R	10	-	-	-	-	-
		EB	EBT	TR	T	20	0.11	22.2	C	20	41
			EBR		R	20	-	-	-	-	-
		WB	WBL	L	L	64	0.20	30.1	C	36	84
			WBT	T	T	20	0.17	26.8	C	31	50
			WBR	TR	R	89	-	-	-	-	-
		SWB	SWL2	LR	L2	40	-	-	-	-	-
			SWL		L	0	0.17	31.8	C	23	48
			SWR		R	0	-	-	-	-	-
		Intersection						34.7	C		
2	Chatham Square & E Broadway	NB	NBL	L	L	85	0.15	15.8	B	31	62
			NBR	R	R	35	0.08	14.9	B	14	30
		EB	EBT	T	T	174	0.17	17.0	B	53	m70
			EBR	R	R	185	0.37	85.3	F	122	m181
		WB	WBL	L	L	130	0.34	12.7	B	48	131
			WBT	T	T	88	0.08	6.7	A	15	30
		Intersection						33.1	C		
3	Chatham Square/Bowery & Divison St	NB	NBL	L	L	110	0.43	36.6	D	66	112
			NBR	T	T	225	0.41	16.3	B	81	140
		EB	EBT	T	T	199	0.24	6.0	A	12	19
			EBR2	TR	R2	10	-	-	-	-	-
		WB	WBL	LT	L	5	-	-	-	-	-
			WBT	T	T	108	0.13	18.8	B	23	42
		Intersection						17.1	B		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Lower East Side Study Area - With Action - PM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Park Row/Chatham Square & Worth/Oliver St & Mott St	NB	NBL	LT	L	5	-	-	-	-	-
			NBT		T	175	0.37	26.8	C	85	145
			NBR2	R	R2	199	0.54	32.6	C	114	167
		SB	SBL	T	T	165	0.62	42.3	D	83	156
			SBT	TR	T	95	0.24	24.7	C	48	88
			SBR		R	5	-	-	-	-	-
		EB	EBT	TR	T	25	0.09	22.1	C	17	37
			EBR		R	10	-	-	-	-	-
		WB	WBL	L	L	66	0.21	32.8	C	46	86
			WBT	T	T	20	0.20	29.8	C	43	70
			WBR	TR	R	110	-	-	-	-	-
		SWB	SWL2	LR	L2	55	-	-	-	-	-
			SWL		L	0	0.24	33.0	C	33	65
			SWR		R	0	-	-	-	-	-
		Intersection						31.5	C		
2	Chatham Square & E Broadway	NB	NBL	L	L	105	0.20	16.3	B	41	73
			NBR	R	R	45	0.09	15.0	B	18	36
		EB	EBT	T	T	219	0.20	21.0	C	74	85
			EBR	R	R	225	0.39	84.8	F	138	215
		WB	WBL	L	L	125	0.32	15.7	B	61	m125
			WBT	T	T	91	0.08	8.4	A	24	m33
		Intersection						34.5	C		
3	Chatham Square/Bowery & Divison St	NB	NBL	L	L	155	0.62	43.0	D	100	151
			NBR	T	T	395	0.74	26.5	C	198	297
		EB	EBT	T	T	254	0.31	6.8	A	17	23
			EBR2	TR	R2	10	-	-	-	-	-
		WB	WBL	LT	L	5	-	-	-	-	-
			WBT	T	T	61	0.08	18.3	B	13	28
		Intersection						22.9	C		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Long Island City Study Area - Action - AM Peak Hour											
Intersection #	Intersection Name	Approach	Movement	Lane Group	Movement	Volume	V/C	Delay	LOS	Q (50th)	Q (95th)
1a	Pulaski Bridge / 11th Street & Jackson Avenue	NB	NBL	LT	L	71	-	-	-	-	-
			NBT	T	T	701	1.16	122.5	F	~440	#520
			NBR	R	R	406	0.69	44.8	D	192	234
		SB	SBT	T	T	444	0.68	8.7	A	23	27
			SBR	TR	R	64	-	-	-	-	-
		EB	EBL	LT	L	25	-	-	-	-	-
			EBT	T	T	55	0.19	36.7	D	32	50
		WB	WBL	L	L	465	0.66	43.8	D	170	229
			WBT	T	T	215	0.30	14.7	B	100	137
		Intersection	Intersection					59.1	E		
1b	11th Street & 48TH Avenue	NB	NBL	L	L	65	0.40	2.9	A	2	m2
			NBT	T	T	661	0.63	16.0	B	12	m10
		SB	SBT	T	T	498	0.66	39.2	D	200	264
			SBR	TR	R	15	-	-	-	-	-
		WB	WBL	LTR	L	10	-	-	-	-	-
			WBT		T	25	0.08	17.8	B	24	43
			WBR		R	10	-	-	-	-	-
		Intersection	Intersection					24.4	C		
2	50TH Avenue @ Vernon Blvd	NB	NBT	T	T	207	0.35	14.0	B	51	97
			NBR	R	R	13	0.03	10.8	B	3	12
		SB	SBL	LT	L	44	-	-	-	-	-
			SBT		T	163	0.50	17.7	B	59	118
		EB	EBL	LTR	L	35	-	-	-	-	-
			EBT		T	64	0.31	14.0	B	37	66
			EBR		R	30	-	-	-	-	-
		Intersection	Intersection					15.3	B		
3	Green Street & McGuiness Blvd	NB	NBT	T	T	1151	0.83	26.1	C	415	515
			NBR	TR	R	30	-	-	-	-	-
		SB	SBL	L	L	73	0.75	58.6	E	49	#132
			SBT	T	T	942	0.59	17.7	B	266	314
		EB	EBL	LTR	L	182	-	-	-	-	-
			EBT		T	20	0.62	40.4	D	192	248
			EBR		R	40	-	-	-	-	-
		Intersection	Intersection					25.4	C		
4	McGuinness Blvd & Freeman Street	NB	NBT	T	T	1333	-	-	-	-	-
		SB	SBT	T	T	1015	-	-	-	-	-
			SBR	TR	R	115	-	-	-	-	-
		WB	WBR	R	R	179	-	-	-	-	-
		Intersection	Unsignalized								
5	21th Street & 49th Avenue	NB	NBL	LTR	L	35	-	-	-	-	-
			NBT		T	90	0.57	32.9	C	88	161
			NBR		R	40	-	-	-	-	-
		SB	SBL	LTR	L	98	-	-	-	-	-
			SBT		T	127	1.04	95.3	F	~179	#285
			SBR		R	10	-	-	-	-	-
		EB	EBL	LTR	L	36	-	-	-	-	-
			EBT		T	132	0.46	23.8	C	90	135
			EBR		R	10	-	-	-	-	-
		WB	WBL	LT	L	5	-	-	-	-	-
			WBT		T	40	0.11	17.8	B	19	39
			WBR	R	R	310	0.91	57.4	E	179	#351
		Intersection	Intersection					54.5	D		
7	11th Street & Borden Avenue	NB	NBL	LTR	L	16	-	-	-	-	-
			NBT		T	66	-	-	-	-	-
			NBR		R	16	-	-	-	-	-
		SB	SBL	LTR	L	26	-	-	-	-	-
			SBT		T	0	-	-	-	-	-
			SBR		R	94	-	-	-	-	-
		EB	EBL	LTR	L	578	-	-	-	-	-
			EBT		T	50	-	-	-	-	-
			EBR		R	18	-	-	-	-	-
		WB	WBL	LTR	L	40	-	-	-	-	-
			WBT		T	422	-	-	-	-	-
			WBR		R	57	-	-	-	-	-
		Intersection	Unsignalized								
8a	Van Dam Street & QMT Expy	NB	NBL	LT	L	22	-	-	-	-	-
			NBT	T	T	297	0.41	7.0	A	16	18
		SB	SBT	T	T	769	0.63	63.1	E	255	325
			SBR	TR	R	17	-	-	-	-	-
		WB	WBT	T	T	846	0.67	25.6	C	256	294
			WBR	TR	R	259	-	-	-	-	-
		Intersection	Intersection					35.3	D		
8b	Van Dam Street & Borden Avenue	NB	NBT	T	T	290	0.56	42.6	D	127	159
			NBR	TR	R	5	-	-	-	-	-
		SB	SBL	L	L	588	0.90	92.5	F	277	#369
			SBT	T	T	181	0.26	3.0	A	4	6
		EB	EBL	LTR	L	29	-	-	-	-	-
			EBT		T	185	0.31	28.9	C	78	108
			EBR		R	15	-	-	-	-	-
		Intersection	Intersection					56.1	E		
9	Jackson Ave / Northern Blvd & Queens Plaza	NB	NBL	LT	L	0	-	-	-	-	-
			NBT		T	199	0.50	47.3	D	95	127
			NBR	TR	R	15	-	-	-	-	-
		SB	SBL	LT	L	15	-	-	-	-	-
			SBT	T	T	135	0.40	39.0	D	55	76
		EB	EBT	T	T	845	0.42	21.9	C	164	200
			EBR	R	R	287	0.58	28.2	C	191	258
		WB	WBL	LT	L	50	-	-	-	-	-
			WBT	T	T	722	0.48	15.3	B	133	164
			WBR	TR	R	60	-	-	-	-	-
		Intersection	Intersection					24.2	C		
10	Thomson Avenue & Van Dam Street	NB	NBL	L	L	44	0.16	31.3	C	29	58
			NBT	T	T	266	0.59	59.8	E	157	206
			NBR	TRR2	R	0	-	-	-	-	-
			NBR2		R2	25	-	-	-	-	-
		SB	SBT	T	T	446	0.82	68.2	E	264	307
			SBR	R	R	15	0.09	51.3	D	15	36
		EB	EBR	R	R	110	0.11	15.3	B	32	47
			EBR2	R2	R2	90	0.12	11.4	B	41	61
		WB	WBT	T	T	1030	0.67	41.2	D	329	383
		Intersection	Intersection					47.1	D		
11a	Thomson Avenue & Dutch Kills Street	SB	SBL	L	L	0	-	-	-	-	-
			SBR	LR	R	0	-	-	-	-	-
		EB	EBT	T	T	388	-	-	-	-	-
		WB	WBT	T	T	385	-	-	-	-	-
			WBR	R	R	896	-	-	-	-	-
		Intersection	Intersection								
11b	Thomson Avenue & Dutch Kills Street	WB	WBT	T	T	1281	-	-	-	-	-
			WBR	R	R	721	-	-	-	-	-
		EB	EBT	T	T	388	-	-	-	-	-
		Intersection	Unsignalized								
12	21th Street & Queens Plaza N	NB	NBL	LT	L	0	-	-	-	-	-
			NBT	T	T	356	0.46	17.4	B	175	247
		SB	SBT	T	T	951	1.06	72.2	E	~899	#1154
			SBR	R	R	350	0.45	17.0	B	179	233
		WB	WBL	LTR	L	120	-	-	-	-	-
			WBT		T	66	0.67	45.4	D	223	305
			WBR		R	82	-	-	-	-	-
		Intersection	Intersection					47.7	D		

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#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Lower Manhattan Study Area - Build - AM Peak Hour											
Intersection #	Intersection Name	Approach	Movement	Lane Group	Movement	Volume	V/C	Delay	LOS	Q (50th)	Q (95th)
1	Trinity Place & Edgar Street	NB	NBL	LT	L	0	-	-	-	-	-
			NBT	T	T	42	0.04	9.8	A	6	14
		EB	EBL	L	L	35	0.09	20.7	C	16	35
		Intersection	Intersection					15.0	B		
2	Trinity Place & Rector Street	NB	NBT	T	T	70	0.11	10.2	B	13	23
			NBR	R	R	7	-	-	-	-	-
		EB	EBL	LT	L	100	-	-	-	-	-
			EBT		T	34	0.51	31.6	C	74	119
		Intersection	Intersection					23.7	C		
3a	HCT Entrance/Exit & West Street	NB	NBT	T	T	1024	0.71	44.4	D	328	384
			NBR2	R2	R2	444	0.28	0.5	A	-	-
		SB	SBT	T	T	1005	0.62	1.3	A	-	-
		WB	WBL	L	L	1692	0.97	53.0	D	618	#741
		Intersection	Intersection					32.6	C		
3b	HCT Exit & West Street & West Thames Street	NB	NBT	T	T	1024	0.59	1.2	A	-	-
		SB	SBT	T	T	1005	0.73	45.0	D	342	399
			SBR	R	R	0	-	-	-	-	-
		EB	EBR	R	R	0	-	-	-	-	-
		WB	WBR	R	R	1239	0.82	38.4	D	438	513
		Intersection	Intersection					29.2	C		
4	Chambers Street & Centre Street	NB	NBL	L	L	396	0.44	25.9	C	100	143
			NBT	T	T	457	0.52	12.9	B	158	232
		SB	SBT	TR	T	213	0.71	44.7	D	137	199
			SBR		R	27	0.25	34.7	C	16	38
		EB	EBR	R	R	393	0.89	51.0	D	239	#400
		Intersection	Intersection					31.6	C		
5a	Canal Street & Hudson Street/Holland Tunnel On-Ramp	NB	NBL	LTR	L	105	-	-	-	-	-
			NBT		T	670	0.86	40.8	D	179	#255
			NBR		R	150	0.44	31.3	C	76	144
			NBR2	R2	R2	45	0.24	27.8	C	24	51
		EB	EBL2	L2L	L2	49	-	-	-	-	-
			EBL		L	335	0.63	35.9	D	109	159
			EBT	T	T	555	0.67	18.4	B	216	337
		WB	WBT	T	T	337	0.67	17.9	B	35	m42
			WBR	R	R	73	-	-	-	-	-
		Intersection	Intersection					29.8	C		
5b	Canal Street & Holland Tunnel On-Ramp	EB	EBT	T	T	600	0.39	5.0	A	28	36
		WB	WBT	T	T	410	0.96	57.8	E	200	#320
			WBR	R	R	880	1.14	100.9	F	~548	#785
		Intersection	Intersection					57.2	E		
7a	Canal Street S & West Street	NB	NBT	T	T	2659	0.99	48.1	D	803	#928
			NBR	R	R	277	0.58	27.0	C	230	307
		SB	SBL	L	L	675	0.69	113.1	F	380	446
			SBT	T	T	2105	0.74	8.0	A	446	500
		Intersection	Intersection					40.0	D		
7b	Canal Street N & West Street	NB	NBT	T	T	2659	0.59	0.9	A	-	m0
		SB	SBT	T	T	2780	0.55	8.0	A	252	268
		WB	WBL	LR	L	0	-	-	-	-	-
			WBR		R	0	-	-	-	-	-
		Intersection	Intersection					4.5	A		
9	West Street & Albany Street	NB	NBT	T	T	2217	0.77	25.1	C	493	538
			NBR	TR	R	92	-	-	-	-	-
			SBL		L	5	-	-	-	-	-
		SB	SBT	T	T	1657	0.58	19.8	B	271	300
			SBR	R	R	136	-	-	-	-	-
		EB	EBL	L	L	134	-	-	-	-	-
			EBT	T	T	90	0.76	58.1	E	290	359
			EBR	R	R	64	-	-	-	-	-
		Intersection	Intersection					25.3	C		
10	West Street & Vesey Street	NB	NBL	L	L	5	-	-	-	-	-
			NBT	T	T	2232	0.69	19.8	B	410	448
		SB	SBT	T	T	1857	0.69	20.1	C	443	495
			SBR	R	R	321	0.83	41.1	D	256	#490
		EB	EBL	L	L	104	0.57	57.5	E	107	161
			EBR	R	R	79	0.39	48.8	D	73	123
		WB	WBL	LT	L	0	-	-	-	-	-
			WBT		T	0	-	-	-	-	-
			WBR	R	R	0	-	-	-	-	-
		Intersection	Intersection					23.0	C		
11	West Street & Chambers Street	NB	NBT	T	T	2240	0.84	36.5	D	577	627
			NBR	TR	T	63	-	-	-	-	-
		SB	SBL	L	L	222	0.74	78.3	E	132	168
			SBT	T	T	1775	0.63	17.0	B	376	420
			SBR	R	R	48	0.25	57.0	E	51	87
		EB	EBL	LTR	L	103	-	-	-	-	-
			EBT		T	30	0.57	55.2	E	152	238
			EBR		R	15	-	-	-	-	-
		WB	WBL	LT	L	69	-	-	-	-	-
			WBT		T	60	0.57	56.6	E	131	201
			WBR	R	R	305	0.74	45.9	D	287	354
		Intersection	Intersection					33.8	C		
14	Canal Street/Manhattan Bridge & Bowery	EB	EBT	T	T	709	0.73	27.2	C	220	245
			EBR	R	R	103	0.29	20.7	C	47	81
		WB	WBT	T	T	989	0.91	38.2	D	283	#414
		NB	NBT	T	T	289	0.55	34.8	C	90	126
			NBR	R	R	284	0.30	0.7	A	-	-
		SB	SBL	L	L	240	0.45	12.5	B	15	65
			SBT	TR	T	136	0.53	9.3	A	30	57
			SBR		R	74	-	-	-	-	-
		Intersection	Intersection					25.7	C		
15	Manhattan Bridge & Bowery	NB	NBT	T	T	289	0.50	6.6	A	8	10
		SB	SBT	T	T	450	0.29	17.7	B	71	90
		WB	WBR	R	R	377	0.64	32.7	C	127	165
		Intersection	Intersection					19.9	B		
18	6th Avenue & Watts Street	WB	WBT	TR	T	718	0.34	16.9	B	84	108
			WBR		R	25	-	-	-	-	-
		NB	NBL	LT	L	72	-	-	-	-	-
			NBT		T	901	0.42	11.8	B	49	m56
		Intersection	Intersection					13.9	B		
19	Canal Street & 6th Avenue/Laight Street	NEB	NER	R	R	568	0.95	58.9	E	160	#238
		NB	NBL	LTR	L	157	-	-	-	-	-
			NBT		T	650	0.49	23.7	C	114	145
			NBR		R	4	-	-	-	-	-
		EB	EBT	T	T	617	0.78	37.7	D	178	244
		WB	WBT	TR	T	1148	1.03	57.6	E	~335	#427
			WBR		R	250	-	-	-	-	-
		Intersection	Intersection					46.0	D		

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Lower Manhattan Study Area - Build - MD Peak Hour											
Intersection #	Intersection Name	Approach	Movement	Lane Group	Movement	Volume	V/C	Delay	LOS	Q (50th)	Q (95th)
1	Trinity Place & Edgar Street	NB	NBL	LT	L	4	-	-	-	-	-
			NBT	T	T	34	0.03	9.6	A	5	13
		EB	EBL	L	L	291	0.69	33.7	C	173	236
		Intersection	Intersection					31.2	C		
2	Trinity Place & Rector Street	NB	NBT	T	T	264	0.40	41.2	D	114	151
			NBR	R	R	61	-	-	-	-	-
		EB	EBL	LT	L	109	-	-	-	-	-
			EBT		T	44	0.41	24.2	C	76	124
		Intersection	Intersection					35.7	D		
3a	HCT Entrance/Exit & West Street	NB	NBT	T	T	976	0.55	24.3	C	215	260
			NBR2	R2	R2	787	0.41	0.8	A	-	-
		SB	SBT	T	T	1330	0.61	1.0	A	-	-
		WB	WBL	L	L	860	0.65	36.0	D	215	264
		Intersection	Intersection					14.4	B		
3b	HCT Exit & West Street & West Thames Street	NB	NBT	T	T	976	0.46	0.6	A	-	-
		SB	SBT	T	T	1330	0.71	28.1	C	316	373
			SBR	R	R	0	-	-	-	-	-
		EB	EBR	R	R	0	-	-	-	-	-
		WB	WBR	R	R	852	0.76	40.2	D	237	295
		Intersection	Intersection					22.5	C		
4	Chambers Street & Centre Street	NB	NBL	L	L	289	0.36	24.7	C	75	105
			NBT	T	T	364	0.40	11.0	B	104	163
		SB	SBT	TR	T	201	0.68	43.0	D	128	188
			SBR		R	13	0.18	34.0	C	7	24
		EB	EBR	R	R	398	0.90	52.6	D	249	#399
		Intersection	Intersection					33.3	C		
5a	Canal Street & Hudson Street/Holland Tunnel On-Ramp	NB	NBL	LTR	L	75	-	-	-	-	-
			NBT		T	515	0.96	58.7	E	207	#288
			NBR		R	214	0.38	27.5	C	66	94
			NBR2	R2	R2	55	0.29	29.5	C	28	61
		EB	EBL2	L2L	L2	30	-	-	-	-	-
			EBL		L	206	0.43	31.8	C	71	100
			EBT	T	T	315	0.39	12.5	B	98	157
		WB	WBT	T	T	163	0.47	7.9	A	8	13
			WBR	R	R	27	0.12	4.8	A	1	m3
		Intersection	Intersection					35.0	C		
5b	Canal Street & Holland Tunnel On-Ramp	EB	EBT	T	T	370	0.25	5.8	A	26	36
		WB	WBT	T	T	190	0.55	34.1	C	103	174
			WBR	R	R	605	0.58	15.2	B	127	186
		Intersection	Intersection					15.5	B		
7a	Canal Street S & West Street	NB	NBT	T	T	2100	0.92	36.6	D	477	543
			NBR	R	R	141	0.35	22.1	C	91	138
		SB	SBL	L	L	349	0.36	43.2	D	161	200
			SBT	T	T	1835	0.68	6.1	A	308	360
		Intersection	Intersection					24.1	C		
7b	Canal Street N & West Street	NB	NBT	T	T	2100	0.52	0.4	A	-	-
		SB	SBT	T	T	2184	0.45	8.3	A	169	188
		WB	WBL	LR	L	0	-	-	-	-	-
			WBR		R	0	-	-	-	-	-
		Intersection	Intersection					4.4	A		
9	West Street & Albany Street	NB	NBT	T	T	1474	0.60	20.3	C	247	285
			NBR	TR	R	85	-	-	-	-	-
			SBL		L	5	-	-	-	-	-
		SB	SBT	T	T	2126	0.75	23.6	C	331	370
			SBR	R	R	86	-	-	-	-	-
		EB	EBL	L	L	101	-	-	-	-	-
			EBT	T	T	95	0.59	36.3	D	190	252
			EBR	R	R	63	-	-	-	-	-
		Intersection	Intersection					23.2	C		
10	West Street & Vesey Street	NB	NBL	L	L	10	-	-	-	-	-
			NBT	T	T	1841	0.71	22.8	C	313	357
		SB	SBT	T	T	2117	0.86	28.4	C	517	591
			SBR	R	R	164	0.40	20.1	C	79	138
		EB	EBL	L	L	139	0.54	39.0	D	97	166
			EBR	R	R	151	0.46	34.8	C	94	162
		WB	WBL	LT	L	0	-	-	-	-	-
			WBT		T	0	-	-	-	-	-
			WBR	R	R	0	-	-	-	-	-
		Intersection	Intersection					26.3	C		
11	West Street & Chambers Street	NB	NBT	T	T	1868	0.82	34.1	C	395	446
			NBR	TR	T	43	-	-	-	-	-
		SB	SBL	L	L	171	0.45	52.5	D	72	108
			SBT	T	T	2002	0.72	18.1	B	390	446
			SBR	R	R	81	0.34	45.0	D	67	107
		EB	EBL	LTR	L	43	-	-	-	-	-
			EBT		T	0	0.18	33.4	C	38	67
			EBR		R	10	-	-	-	-	-
		WB	WBL	LT	L	73	-	-	-	-	-
			WBT		T	65	0.53	42.6	D	110	161
			WBR	R	R	272	0.58	27.4	C	174	229
		Intersection	Intersection					28.1	C		
14	Canal Street/Manhattan Bridge & Bowery	EB	EBT	T	T	435	0.45	21.5	C	101	144
			EBR	R	R	123	0.34	21.5	C	59	95
		WB	WBT	T	T	554	0.56	23.4	C	137	192
		NB	NBT	T	T	255	0.44	31.1	C	78	106
			NBR	R	R	293	0.30	0.7	A	-	-
		SB	SBL	L	L	224	0.45	12.8	B	6	76
			SBT	TR	T	116	0.47	7.9	A	10	44
			SBR		R	65	-	-	-	-	-
		Intersection	Intersection					17.8	B		
15	Manhattan Bridge & Bowery	NB	NBT	T	T	253	0.23	0.7	A	-	-
		SB	SBT	T	T	405	0.26	17.4	B	62	81
		WB	WBR	R	R	143	0.11	6.7	A	19	30
		Intersection	Intersection					10.1	B		
18	6th Avenue & Watts Street	WB	WBT	TR	T	697	0.33	16.8	B	83	107
			WBR		R	24	-	-	-	-	-
		NB	NBL	LT	L	72	-	-	-	-	-
			NBT		T	770	0.34	7.5	A	25	32
		Intersection	Intersection					11.8	B		
19	Canal Street & 6th Avenue/Laight Street	NEB	NER	R	R	309	0.55	36.2	D	78	114
		NB	NBL	LTR	L	148	-	-	-	-	-
			NBT		T	657	0.46	23.3	C	109	138
			NBR		R	3	-	-	-	-	-
		EB	EBT	T	T	376	0.53	30.3	C	105	152
		WB	WBT	TR	T	642	0.63	21.2	C	133	178
			WBR		R	131	-	-	-	-	-
		Intersection	Intersection					25.5	C		

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Lower Manhattan Study Area - Build - PM Peak Hour											
Intersection #	Intersection Name	Approach	Movement	Lane Group	Movement	Volume	V/C	Delay	LOS	Q (50th)	Q (95th)
1	Trinity Place & Edgar Street	NB	NBL	LT	L	0	-	-	-	-	-
			NBT	T	T	0	-	-	-	-	-
		EB	EBL	L	L	136	0.28	23.3	C	63	110
		Intersection	Intersection					23.3	C		
2	Trinity Place & Rector Street	NB	NBT	T	T	121	0.19	35.6	D	42	68
			NBR	R	R	15	-	-	-	-	-
		EB	EBL	LT	L	68	-	-	-	-	-
			EBT		T	38	0.30	22.2	C	51	86
		Intersection	Intersection					29.6	C		
3a	HCT Entrance/Exit & West Street	NB	NBT	T	T	538	0.30	23.2	C	134	151
			NBR2	R2	R2	1206	0.61	1.2	A	-	-
		SB	SBT	T	T	1197	0.57	0.8	A	-	-
		WB	WBL	L	L	349	0.29	35.7	D	96	126
		Intersection	Intersection					8.4	A		
3b	HCT Exit & West Street & West Thames Street	NB	NBT	T	T	538	0.26	0.5	A	-	-
		SB	SBT	T	T	1197	0.63	29.7	C	348	393
			SBR	R	R	0	-	-	-	-	-
		EB	EBR	R	R	0	-	-	-	-	-
		WB	WBR	R	R	510	0.48	39.5	D	174	208
		Intersection	Intersection					24.7	C		
4	Chambers Street & Centre Street	NB	NBL	L	L	374	0.43	25.7	C	93	134
			NBT	T	T	448	0.55	13.5	B	164	229
		SB	SBT	TR	T	290	0.97	77.4	E	195	#327
			SBR		R	12	0.14	31.9	C	7	22
		EB	EBR	R	R	464	1.08	93.2	F	~353	#492
		Intersection	Intersection					52.1	D		
5a	Canal Street & Hudson Street/Holland Tunnel On-Ramp	NB	NBL	LTR	L	45	-	-	-	-	-
			NBT		T	585	0.88	44.6	D	195	#297
			NBR		R	159	0.26	25.8	C	44	73
			NBR2	R2	R2	8	0.04	23.8	C	4	14
		EB	EBL2	L2L	L2	5	-	-	-	-	-
			EBL		L	178	0.32	30.2	C	54	77
			EBT	T	T	419	0.49	14.1	B	144	222
		WB	WBT	T	T	0	-	-	-	-	-
			WBR	R	R	0	-	-	-	-	-
		Intersection	Intersection					31.4	C		
5b	Canal Street & Holland Tunnel On-Ramp	EB	EBT	T	T	427	0.27	3.1	A	11	15
		WB	WBT	T	T	0	-	-	-	-	-
			WBR	R	R	1405	1.23	131.8	F	~628	#773
		Intersection	Intersection					102.6	F		
7a	Canal Street S & West Street	NB	NBT	T	T	2629	0.96	41.1	D	752	820
			NBR	R	R	5	0.01	14.8	B	2	9
		SB	SBL	L	L	484	0.53	112.1	F	293	345
			SBT	T	T	1734	0.60	5.0	A	58	55
		Intersection	Intersection					35.9	D		
7b	Canal Street N & West Street	NB	NBT	T	T	2629	0.60	0.8	A	-	-
		SB	SBT	T	T	2218	0.44	8.6	A	201	217
		WB	WBL	LR	L	0	-	-	-	-	-
			WBR		R	0	-	-	-	-	-
		Intersection	Intersection					4.4	A		
9	West Street & Albany Street	NB	NBT	T	T	1227	0.46	20.1	C	221	251
			NBR	TR	R	47	-	-	-	-	-
			SBL		L	0	-	-	-	-	-
		SB	SBT	T	T	2192	0.66	24.1	C	382	413
			SBR	R	R	76	-	-	-	-	-
		EB	EBL	L	L	139	-	-	-	-	-
			EBT	T	T	90	0.71	50.4	D	294	412
			EBR	R	R	81	-	-	-	-	-
		Intersection	Intersection					25.0	C		
10	West Street & Vesey Street	NB	NBL	L	L	0	-	-	-	-	-
			NBT	T	T	1462	0.42	14.7	B	216	241
		SB	SBT	T	T	2345	0.79	23.3	C	610	672
			SBR	R	R	134	0.31	15.2	B	64	109
		EB	EBL	L	L	99	0.57	57.9	E	102	156
			EBR	R	R	121	0.60	58.5	E	118	191
		WB	WBL	LT	L	10	-	-	-	-	-
			WBT		T	0	0.05	39.7	D	9	25
			WBR	R	R	0	-	-	-	-	-
		Intersection	Intersection					22.1	C		
11	West Street & Chambers Street	NB	NBT	T	T	1754	0.70	33.9	C	420	463
			NBR	TR	T	35	-	-	-	-	-
		SB	SBL	L	L	183	0.77	85.0	F	112	143
			SBT	T	T	1809	0.67	22.1	C	448	498
			SBR	R	R	90	0.44	66.6	E	85	146
		EB	EBL	LTR	L	49	-	-	-	-	-
			EBT		T	20	0.26	39.6	D	66	101
			EBR		R	5	-	-	-	-	-
		WB	WBL	LT	L	126	-	-	-	-	-
			WBT		T	90	0.73	58.4	E	224	329
			WBR	R	R	392	0.72	40.4	D	301	423
		Intersection	Intersection					34.1	C		
14	Canal Street/Manhattan Bridge & Bowery	EB	EBT	T	T	800	0.76	27.7	C	221	297
			EBR	R	R	83	0.29	21.1	C	38	69
		WB	WBT	T	T	347	0.33	19.6	B	84	110
		NB	NBT	T	T	167	0.29	29.0	C	46	74
			NBR	R	R	472	0.42	1.1	A	-	-
		SB	SBL	L	L	400	0.60	15.1	B	64	98
			SBT	TR	T	46	0.11	3.6	A	2	4
			SBR		R	16	0.05	2.8	A	1	2
		Intersection	Intersection					18.4	B		
15	Manhattan Bridge & Bowery	NB	NBT	T	T	167	0.15	1.5	A	2	2
		SB	SBT	T	T	462	0.23	17.0	B	55	70
		WB	WBR	R	R	222	0.17	7.1	A	32	45
		Intersection	Intersection					11.2	B		
18	6th Avenue & Watts Street	WB	WBT	TR	T	195	0.10	14.7	B	22	30
			WBR		R	0	-	-	-	-	-
		NB	NBL	LT	L	132	-	-	-	-	-
			NBT		T	483	0.27	34.6	C	81	m106
		Intersection	Intersection					29.5	C		
19	Canal Street & 6th Avenue/Laight Street	NEB	NER	R	R	346	0.61	37.4	D	92	125
		NB	NBL	LTR	L	37	-	-	-	-	-
			NBT		T	591	0.36	22.1	C	86	110
			NBR		R	3	-	-	-	-	-
		EB	EBT	T	T	351	0.47	29.2	C	101	137
		WB	WBT	TR	T	1247	0.90	31.2	C	283	301
			WBR		R	9	-	-	-	-	-
		Intersection	Intersection					29.6	C		

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Queens Midtown Tunnel Study Area - With Action (no mitigation) - MD Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	E 37th Street & 3rd Avenue	NB	NBL	L	L	39	0.10	4.6	A	3	m5
			NBT	T	T	576	0.44	4.8	A	14	23
		WB	WBT	T	T	574	0.95	48.2	D	178	#291
			WBR	R	R	259	0.71	43.9	D	96	131
		Intersection	Intersection					29.0	C		
2	E 36th Street & 2nd Avenue	SB	SBL	L	L	207	0.37	27.6	C	53	86
			SBT	T	T	1012	0.49	11.6	B	121	155
		EB	EBT	T	T	1142	1.21	134.3	F	~353	#445
			EBR	TR	R	84	-	-	-	-	-
		WB	WBL	L	L	0	-	-	-	-	-
		Intersection	Intersection					75.3	E		
3	E 34th Street & 3rd Avenue	NB	NBL	LT	L	22	-	-	-	-	-
			NBT	T	T	967	0.43	17.9	B	100	123
			NBR	R	R	162	0.73	41.9	D	78	#191
		EB	EBT	T	T	397	0.86	45.2	D	228	#402
		WB	WBT	T	T	420	0.91	52.5	D	243	#431
			WBR	R	R	78	0.29	23.2	C	38	69
		Intersection	Intersection					32.4	C		
4	E 35th Street & 3rd Avenue	NB	NBL	LT	L	78	-	-	-	-	-
			NBT	T	T	967	0.74	11.6	B	249	320
		WB	WBT	T	T	477	0.52	24.6	C	130	180
			WBR	TR	R	56	0.18	21.1	C	26	51
		Intersection	Intersection					16.0	B		
5	E 34th Street & 2nd Ave	SB	SBL	L	L	225	0.37	29.7	C	75	110
			SBT	T	T	1299	0.71	21.4	C	285	342
			SBR	R	R	42	0.32	18.0	B	12	m31
		EB	EBT	T	T	557	0.71	32.7	C	158	221
			EBR	TR	R	126	0.57	36.9	D	65	130
		WB	WBT	T	T	231	0.57	32.0	C	122	202
		Intersection	Intersection					26.5	C		
6	E 35th Street & 2nd Ave	SB	SBT	T	T	1018	0.56	12.0	B	50	m57
			SBR	R	R	78	-	-	-	-	-
		EB	EBR	R	R	468	0.61	25.9	C	128	188
		WB	WBT	T	T	85	0.14	18.3	B	27	42
			WBL	L	L	80	0.14	18.9	B	26	50
		Intersection	Intersection					16.4	B		

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Queens Midtown Tunnel Study Area - With Action (no mitigation) - LN Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	E 37th Street & 3rd Avenue	NB	NBL	L	L	22	0.07	3.5	A	1	m3
			NBT	T	T	976	0.51	4.5	A	15	18
		WB	WBT	T	T	372	0.29	14.4	B	72	101
			WBR	R	R	346	1.00	83.7	F	~136	#213
		Intersection	Intersection					23.9	C		
2	E 36th Street & 2nd Avenue	SB	SBL	L	L	368	0.46	28.4	C	90	133
			SBT	T	T	1467	0.64	13.8	B	200	247
		EB	EBT	T	T	520	0.50	27.7	C	104	140
			EBR	TR	R	47	-	-	-	-	-
		WB	WBL	L	L	0	-	-	-	-	-
		Intersection	Intersection					19.3	B		
3	E 34th Street & 3rd Avenue	NB	NBL	LT	L	36	-	-	-	-	-
			NBT	T	T	1167	0.48	18.4	B	124	151
			NBR	R	R	184	0.54	24.9	C	84	152
		EB	EBT	T	T	432	0.45	23.3	C	105	151
		WB	WBT	T	T	288	0.32	21.6	C	68	101
			WBR	R	R	94	0.31	23.2	C	46	80
		Intersection	Intersection					20.6	C		
4	E 35th Street & 3rd Avenue	NB	NBL	LT	L	51	-	-	-	-	-
			NBT	T	T	1210	0.49	4.2	A	17	20
		WB	WBT	T	T	392	0.43	23.1	C	107	143
			WBR	TR	R	52	0.14	20.4	C	24	48
		Intersection	Intersection					9.4	A		
5	E 34th Street & 2nd Ave	SB	SBL	L	L	338	0.55	26.3	C	119	152
			SBT	T	T	1334	0.69	13.1	B	230	270
			SBR	R	R	98	0.26	7.7	A	15	m23
		EB	EBT	T	T	588	0.62	29.1	C	136	165
			EBR	TR	R	70	-	-	-	-	-
		WB	WBT	T	T	181	0.24	24.0	C	47	71
		Intersection	Intersection					19.7	B		
6	E 35th Street & 2nd Ave	SB	SBT	T	T	1423	0.65	11.3	B	55	62
			SBR	R	R	91	-	-	-	-	-
		EB	EBR	R	R	273	0.34	20.8	C	65	101
		WB	WBT	T	T	78	0.12	18.0	B	23	42
			WBL	L	L	74	0.11	18.5	B	23	45
		Intersection	Intersection					13.2	B		

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RFK Bridge Study Area - Action - AM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	126th Street and 2nd Avenue	NW	NWL2	L	L2	30	-	-	-	-	-
			NWL		L	190	0.97	85.0	F	150	#271
			NWR	R	R	415	0.31	7.3	A	61	79
		SB	SBT	TR	T	1183	0.53	21.5	C	123	149
			SBR		R	42	-	-	-	-	-
		WB	WBL	L	L	39	-	-	-	-	-
			WBT	T	T	29	0.77	54.7	D	104	#178
			WBR	R	R	90	-	-	-	-	-
		Intersection	Intersection					28.5	C		
2	125th Street and 2nd Avenue	SB	SBL	L	L	502	0.54	7.5	A	23	m30
			SBT	TR	T	699	0.54	6.7	A	20	m24
			SBR		R	51	-	-	-	-	-
		SW	SWL	L	L	453	1.22	147.1	F	~256	#342
			SWR	R	R	153	-	-	-	-	-
		EB	EBT	TR	T	672	0.92	50.4	D	168	#228
			EBR		R	40	-	-	-	-	-
		WB	WBL	LT	L	11	-	-	-	-	-
			WBT		T	29	0.10	27.2	C	10	24
		Intersection	Intersection					52.7	D		
11	E 134th Street & St. Ann's Avenue	NB	NBT	TR	T	140	0.46	18.5	B	98	m125
			NBR		R	80	-	-	-	-	-
		SB	SBL	LT	L	145	-	-	-	-	-
			SBT		T	105	0.62	20.2	C	76	128
		EB	EBL	LTR	L	140	-	-	-	-	-
			EBT		T	120	0.80	33.1	C	116	#213
			EBR		R	45	-	-	-	-	-
		Intersection	Intersection					24.8	C		
22	St Ann's Ave and Bruckner Blvd	NB	NBL	LTR	L	25	-	-	-	-	-
			NBT		T	105	0.56	46.0	D	119	196
			NBR		R	30	-	-	-	-	-
		SB	SBL	LTR	L	55	-	-	-	-	-
			SBT		T	70	0.57	48.6	D	134	m186
			SBR		R	25	-	-	-	-	-
		EB	EBL	LTR	L	50	-	-	-	-	-
			EBT		T	1440	0.90	25.6	C	505	657
			EBR		R	30	-	-	-	-	-
		WB	WBL	LTR	L	40	-	-	-	-	-
			WBT		T	480	0.50	11.6	B	131	157
			WBR		R	65	-	-	-	-	-
		Intersection	Intersection					24.9	C		
17	31st St & Astoria Blvd	NB	NBT	T	T	70	0.19	36.1	D	48	88
			NBR	R	R	13	0.02	7.2	A	4	11
		SB	SBT	T	T	547	0.61	26.3	C	409	543
			SBR	R	R	169	0.40	23.9	C	110	183
		EB	EBL	L	L	11	-	-	-	-	-
			EBT	T	T	382	0.54	33.2	C	163	197
			EBR	R	R	27	-	-	-	-	-
		Intersection	Intersection					28.9	C		
24	Hoyt N & 31st St	NB	NBL	L	L	15	-	-	-	-	-
			NBT	T	T	75	0.16	19.3	B	40	m61
		SB	SBT	T	T	243	0.77	107.2	F	171	208
			SBR	R	R	129	-	-	-	-	-
		WB	WBL	L	L	402	0.26	9.3	A	73	92
			WBT	T	T	2109	0.65	13.9	B	277	314
			WBR	R	R	35	0.10	8.5	A	11	24
		Intersection	Intersection					26.3	C		
3	Hoyt S & 31st St	NB	NBT	T	T	74	0.12	22.6	C	13	20
			NBR	R	R	7	-	-	-	-	-
		SB	SBL	L	L	20	-	-	-	-	-
			SBT	T	T	625	0.37	14.8	B	203	254
		EB	EBL	L	L	16	-	-	-	-	-
			EBT	T	T	940	0.83	48.5	D	236	265
			EBR	R	R	91	0.39	42.0	D	72	114
		Intersection	Intersection					35.1	D		

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RFK Bridge Study Area - Action - PM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	126th Street and 2nd Avenue	NW	NWL2	L	L2	25	-	-	-	-	-
			NWL		L	180	0.93	76.4	E	140	#244
			NWR	R	R	765	0.55	10.0	B	138	176
		SB	SBT	TR	T	1332	0.53	21.4	C	132	157
			SBR		R	31	-	-	-	-	-
		WB	WBL	L	L	42	-	-	-	-	-
			WBT	T	T	22	0.50	37.5	D	66	108
			WBR	R	R	44	-	-	-	-	-
		Intersection	Intersection					23.5	C		
2	125th Street and 2nd Avenue	SB	SBL	L	L	633	0.66	9.8	A	28	m35
			SBT	TR	T	715	0.47	6.1	A	20	m24
			SBR		R	51	-	-	-	-	-
		SW	SWL	L	L	583	1.39	216.6	F	~339	#455
			SWR	R	R	218	-	-	-	-	-
		EB	EBT	TR	T	731	0.86	43.2	D	160	#227
			EBR		R	20	-	-	-	-	-
		WB	WBL	LT	L	26	-	-	-	-	-
			WBT		T	83	0.26	29.2	C	29	54
		Intersection	Intersection					71.4	E		
11	E 134th Street & St. Ann's Avenue	NB	NBT	TR	T	110	0.41	10.9	B	44	m96
			NBR		R	100	-	-	-	-	-
		SB	SBL	LT	L	110	-	-	-	-	-
			SBT		T	50	0.38	13.8	B	42	75
		EB	EBL	LTR	L	155	-	-	-	-	-
			EBT		T	140	0.78	30.3	C	116	#205
			EBR		R	30	-	-	-	-	-
		Intersection	Intersection					20.5	C		
22	St Ann's Ave and Bruckner Blvd	NB	NBL	LTR	L	20	-	-	-	-	-
			NBT		T	95	0.50	43.0	D	118	169
			NBR		R	30	-	-	-	-	-
		SB	SBL	LTR	L	35	-	-	-	-	-
			SBT		T	20	0.29	39.6	D	58	m91
			SBR		R	25	-	-	-	-	-
		EB	EBL	LTR	L	50	-	-	-	-	-
			EBT		T	1300	0.85	22.5	C	452	577
			EBR		R	45	-	-	-	-	-
		WB	WBL	LTR	L	25	-	-	-	-	-
			WBT		T	610	0.46	11.4	B	153	181
			WBR		R	65	-	-	-	-	-
		Intersection	Intersection					21.1	C		
17	31st St & Astoria Blvd	NB	NBT	T	T	48	0.13	27.6	C	24	54
			NBR	R	R	7	0.01	4.4	A	1	5
		SB	SBT	T	T	433	0.53	76.5	E	171	260
			SBR	R	R	198	0.67	91.3	F	98	164
		EB	EBL	L	L	17	-	-	-	-	-
			EBT	T	T	402	0.52	23.3	C	125	162
			EBR	R	R	50	-	-	-	-	-
		Intersection	Intersection					54.4	D		
24	Hoyt N & 31st St	NB	NBL	L	L	21	-	-	-	-	-
			NBT	T	T	49	0.13	28.5	C	30	m52
		SB	SBT	T	T	56	0.26	37.0	D	46	76
			SBR	R	R	66	-	-	-	-	-
		WB	WBL	L	L	514	0.34	9.7	A	98	118
			WBT	T	T	1445	0.45	10.4	B	155	179
			WBR	R	R	35	0.07	7.8	A	11	22
		Intersection	Intersection					12.4	B		
3	Hoyt S & 31st St	NB	NBT	T	T	59	0.09	38.4	D	23	43
			NBR	R	R	6	-	-	-	-	-
		SB	SBL	L	L	20	-	-	-	-	-
			SBT	T	T	550	0.35	8.9	A	136	163
		EB	EBL	L	L	11	-	-	-	-	-
			EBT	T	T	1111	0.63	33.7	C	221	261
			EBR	R	R	81	0.24	29.0	C	54	88
		Intersection	Intersection					26.1	C		

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RFK Bridge Study Area - Action - LN Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	126th Street and 2nd Avenue	NW	NWL2	L	L2	5	-	-	-	-	-
			NWL		L	75	0.36	35.3	D	49	85
			NWR	R	R	535	0.40	8.1	A	85	107
		SB	SBT	TR	T	540	0.23	18.1	B	48	64
			SBR		R	17	-	-	-	-	-
		WB	WBL	L	L	20	-	-	-	-	-
			WBT	T	T	33	0.44	35.2	D	63	119
			WBR	R	R	57	-	-	-	-	-
		Intersection	Intersection					16.4	B		
2	125th Street and 2nd Avenue	SB	SBL	L	L	124	0.15	5.8	A	7	10
			SBT	TR	T	424	0.29	6.2	A	14	17
			SBR		R	17	-	-	-	-	-
		SW	SWL	L	L	187	0.66	39.1	D	100	147
			SWR	R	R	164	-	-	-	-	-
		EB	EBT	TR	T	682	0.84	41.9	D	163	#223
			EBR		R	50	-	-	-	-	-
		WB	WBL	LT	L	8	-	-	-	-	-
			WBT		T	37	0.09	26.9	C	12	25
		Intersection	Intersection					28.3	C		
11	E 134th Street & St. Ann's Avenue	NB	NBT	TR	T	100	0.21	17.0	B	53	m72
			NBR		R	20	-	-	-	-	-
		SB	SBL	LT	L	40	-	-	-	-	-
			SBT		T	50	0.18	10.9	B	23	44
		EB	EBL	LTR	L	190	-	-	-	-	-
			EBT		T	90	0.70	25.0	C	105	164
			EBR		R	35	-	-	-	-	-
		Intersection	Intersection					20.6	C		
22	St Ann's Ave and Bruckner Blvd	NB	NBL	LTR	L	10	-	-	-	-	-
			NBT		T	55	0.24	33.0	C	57	91
			NBR		R	15	-	-	-	-	-
		SB	SBL	LTR	L	30	-	-	-	-	-
			SBT		T	10	0.25	35.0	C	66	m104
			SBR		R	45	-	-	-	-	-
		EB	EBL	LTR	L	40	-	-	-	-	-
			EBT		T	1515	0.88	26.6	C	527	654
			EBR		R	10	-	-	-	-	-
		WB	WBL	LTR	L	10	-	-	-	-	-
			WBT		T	500	0.33	12.2	B	111	145
			WBR		R	25	-	-	-	-	-
		Intersection	Intersection					23.7	C		
17	31st St & Astoria Blvd	NB	NBT	T	T	24	0.07	26.8	C	13	32
			NBR	R	R	6	0.01	4.5	A	1	5
		SB	SBT	T	T	306	0.41	7.3	A	30	39
			SBR	R	R	147	0.34	8.3	A	14	22
		EB	EBL	L	L	10	-	-	-	-	-
			EBT	T	T	322	0.36	20.7	C	81	118
			EBR	R	R	17	-	-	-	-	-
		Intersection	Intersection					13.5	B		
24	Hoyt N & 31st St	NB	NBL	L	L	11	-	-	-	-	-
			NBT	T	T	24	0.05	10.5	B	3	m7
		SB	SBT	T	T	167	0.23	21.1	C	47	75
			SBR	R	R	38	-	-	-	-	-
		WB	WBL	L	L	444	0.33	42.2	D	79	107
			WBT	T	T	1065	0.41	13.1	B	112	134
			WBR	R	R	20	0.04	10.4	B	6	16
		Intersection	Intersection					21.2	C		
3	Hoyt S & 31st St	NB	NBT	T	T	29	0.04	17.4	B	4	11
			NBR	R	R	5	-	-	-	-	-
		SB	SBL	L	L	204	-	-	-	-	-
			SBT	T	T	407	0.58	31.8	C	167	206
		EB	EBL	L	L	6	-	-	-	-	-
			EBT	T	T	864	0.51	25.3	C	124	156
			EBR	R	R	46	0.14	22.3	C	22	45
		Intersection	Intersection					27.7	C		

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Red Hook Study Area - With-Action - AM Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Hamilton Avenue, Clinton Street & West 9th Street	EB	EBT	TR	T	113	0.43	44.8	D	94	140
			EBR		R	0	-	-	-	-	-
		NB	NBL	LT	L	260	-	-	-	-	-
			NBT		T	2407	0.64	8.0	A	117	144
		SB (at West 9th)	SBT	TR	T	1139	0.41	8.4	A	141	168
			SBR		R	83	-	-	-	-	-
		SB (at Clinton St)	SBL	L	L	255	0.29	4.7	A	31	42
			SBT	LTR	T	879	0.54	6.7	A	54	71
			SBR		R	120	-	-	-	-	-
		WB	WBL	L	L	115	0.14	54.5	D	41	59
			WBT	T	T	145	0.24	58.6	E	76	106
		Intersection						10.1	B		
2	Hamilton Avenue NB & West 9th Street	NB	NBT	T	T	2059	0.60	14.4	B	270	303
		WB	WBR	R	R	240	0.41	36.4	D	103	134
		Intersection	Intersection					17.0	B		

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#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Red Hook Study Area - With-Action - MD Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Hamilton Avenue, Clinton Street & West 9th Street	EB	EBT	TR	T	109	0.37	41.4	D	87	131
			EBR		R	0	-	-	-	-	-
		NB	NBL	LT	L	245	-	-	-	-	-
			NBT		T	2167	0.60	8.4	A	110	131
		SB (at West 9th)	SBT	TR	T	1170	0.43	9.5	A	159	188
			SBR		R	93	-	-	-	-	-
		SB (at Clinton St)	SBL	L	L	261	0.28	4.7	A	29	41
			SBT	LTR	T	905	0.57	7.2	A	60	74
			SBR		R	134	-	-	-	-	-
		WB	WBL	L	L	130	0.14	56.0	E	41	65
			WBT	T	T	115	0.16	56.4	E	57	90
		Intersection						10.4	B		
2	Hamilton Avenue NB & West 9th Street	NB	NBT	T	T	1919	0.52	10.7	B	209	236
		WB	WBR	R	R	123	0.27	38.4	D	54	78
		Intersection	Intersection					12.7	B		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Red Hook Study Area - With-Action - LN Peak Hour											
Intersection #	**Intersection Name**	**Approach**	**Movement**	**Lane Group**	**Movement**	**Volume**	**V/C**	**Delay**	**LOS**	**Q (50th)**	**Q (95th)**
1	Hamilton Avenue, Clinton Street & West 9th Street	EB	EBT	TR	T	56	0.17	37.5	D	42	74
			EBR		R	0	-	-	-	-	-
		NB	NBL	LT	L	75	-	-	-	-	-
			NBT		T	1203	0.34	8.5	A	77	85
		SB (at West 9th)	SBT	TR	T	747	0.25	7.8	A	84	103
			SBR		R	45	-	-	-	-	-
		SB (at Clinton St)	SBL	L	L	196	0.20	2.6	A	13	17
			SBT	LTR	T	551	0.29	2.5	A	18	22
			SBR		R	25	-	-	-	-	-
		WB	WBL	L	L	25	0.03	60.6	E	9	19
			WBT	T	T	50	0.07	61.7	E	24	47
		Intersection						8.3	A		
2	Hamilton Avenue NB & West 9th Street	NB	NBT	T	T	959	0.25	7.8	A	83	99
		WB	WBR	R	R	67	0.13	36.4	D	28	47
		Intersection	Intersection					10.0	A		

~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

Upper East Side Study Area - Action - LN Peak Hour											
Intersection #	Intersection Name	Approach	Movement	Lane Group	Movement	Volume	V/C	Delay	LOS	Q (50th)	Q (95th)
1	E 60th Street & Queensboro Bridge Exit	NB	NBL	LTR	L	9	-	-	-	-	-
			NBT		T	79	-	-	-	-	-
			NBR		R	273	-	-	-	-	-
		EB	EBL	LT	L	0	-	-	-	-	-
			EBT		T	10	-	-	-	-	-
		Intersection	Unsignalized								
2	E 60th Street & 3rd Ave	NB	NBL	L	L	70	0.14	17.9	B	30	54
			NBT	T	T	932	0.46	20.7	C	115	144
		WB	WBT	T	T	219	0.38	16.4	B	63	178
			WBR	R	R	30	0.14	33.7	C	20	46
		Intersection	Intersection					20.0	C		
3	E 60th Street & York Ave	NB	NBT	T	T	475	0.27	18.8	B	90	110
		SB	SBT	T	T	378	0.19	18.0	B	62	84
		EB	EBL	L	L	228	0.31	29.1	C	80	122
			EBT	LT	T	0	0.33	29.4	C	80	118
			EBR	R	R	25	0.06	24.5	C	15	33
		WB	WBL	L	L	0	-	-	-	-	-
			WBT	T	T	0	-	-	-	-	-
			WBR	R	R	0	-	-	-	-	-
		Intersection	Intersection					21.0	C		
4	E 59th Street & 2nd Ave	EB	EBT	T	T	181	0.20	21.4	C	44	66
			EBR	RR2	R	120	0.65	33.6	C	125	183
			EBR2		R2	94	-	-	-	-	-
		SB	SBL2	L2	L2	227	0.16	2.4	A	7	12
			SBL	L2L	L	6	-	-	-	-	-
			SBT	T	T	741	0.35	3.1	A	16	24
		Intersection	Intersection					10.6	B		
5	E 60th Street & 2nd Ave	NWB	NWL2	L2	L2	160	0.10	15.9	B	22	33
			NWL	L	L	150	0.14	16.3	B	31	47
		SB	SBL2	L2	L2	14	-	-	-	-	-
			SBT	TR	T	809	0.35	17.0	B	93	118
			SBR		R	94	0.25	17.4	B	40	69
		WB	WBL	LT	L	5	-	-	-	-	-
			WBT	T	T	5	0.01	15.2	B	2	6
		Intersection	Intersection					16.8	B		
6	E 60th Street & 1st Ave	NB	NBT	T	T	1116	0.45	15.7	B	113	138
			NBR	TR	R	86	-	-	-	-	-
		EB	EBL	L	L	116	0.33	25.7	C	61	98
			EBT	T	T	167	0.15	15.9	B	35	53
		Intersection	Intersection					16.6	B		
7	E 60th Street & Lexington Ave	SB	SBT	T	T	743	0.63	22.6	C	176	239
			SBR	R	R	47	0.11	16.0	B	19	38
		WB	WBL	L	L	64	0.15	20.7	C	33	68
			WBT	T	T	225	0.26	21.9	C	68	93
		Intersection	Intersection					22.0	C		
8a	E 60th Street & Park Ave NB	NB	NBL	LT	L	50	-	-	-	-	-
			NBT	T	T	499	0.29	18.3	B	90	117
			WBT	T	T	237	0.34	27.0	C	85	113
			WBR	TR	R	35	-	-	-	-	-
		Intersection	Intersection					21.4	C		
8b	E 60th Street & Park Ave NB	SB	SBT	T	T	808	0.50	21.1	C	165	205
			SBR	TR	R	96	-	-	-	-	-
		WB	WBL	L	L	97	-	-	-	-	-
			WBT	T	T	190	0.36	10.9	B	25	31
		Intersection	Intersection					18.5	B		
9	E 60th Street & Madison Ave	NB	NBL	L	L	73	0.14	17.3	B	33	59
			NBT	T	T	810	0.59	16.0	B	192	248
		WB	WBT	T	T	234	0.35	18.3	B	42	52
			WBR	TR	R	52	-	-	-	-	-
		Intersection	Intersection					16.7	B		
10	E 62nd Street & Queensboro Bridge Exit	NB	NBT	T	T	1094	0.78	15.3	B	282	381
			NBR	R	R	834	0.79	20.9	C	249	#453
		EB	EBL	LT	L	7	-	-	-	-	-
			EBT	T	T	99	0.17	27.6	C	28	50
		Intersection	Intersection					17.6	B		
11	E 60th Street & 5th Ave	SB	SBT	T	T	599	0.62	10.0	B	33	40
			SBR	R	R	194	0.49	10.2	B	21	30
		WB	WBL	L	L	152	0.34	24.2	C	71	123
			WBT	T	T	155	0.19	21.3	C	35	59
		Intersection	Intersection					13.5	B		
12	E 63rd Street & York Ave	NB	NBT	T	T	166	0.40	33.8	C	120	170
			NBR	TR	R	285	0.35	6.6	A	61	92
		SB	SBL	L	L	325	0.43	22.7	C	88	144
			SBT	T	T	338	0.40	18.3	B	101	117
			SBR	TR	R	49	-	-	-	-	-
		WB	WBL	L	L	234	0.40	36.3	D	114	187
			WBT	LT	T	228	0.40	34.5	C	117	164
			WBR	TR	R	21	-	-	-	-	-
		Intersection	Intersection					23.2	C		
13	E 53rd Street & FDR Drive	SB	SBR	R	R	131	-	-	-	-	-
		SWB	SWR	R	R	315	-	-	-	-	-
		Intersection	Unsignalized								
14	E 61st Street & 5th Ave	SB	SBT	T	T	734	0.44	20.1	C	114	148
		WB	WBL	L	L	59	0.06	16.9	B	12	23
		Intersection	Intersection					19.9	B		
15	E 65th Street & 5th Ave	SB	SBL	LT	L	69	-	-	-	-	-
			SBT	T	T	668	0.43	6.6	A	33	39
		EB	EBT	T	T	646	0.72	32.7	C	177	242
			EBR	R	R	198	0.56	32.1	C	113	171
		Intersection	Intersection					19.9	B		
16	E 66th Street & 5th Avenue	SB	SBT	T	T	682	0.52	17.5	B	141	180
			SBR	TR	R	242	-	-	-	-	-
		WB	WBL	LT	L	55	-	-	-	-	-
			WBT	T	T	439	0.56	28.6	C	138	189
		Intersection	Intersection					21.4	C		
17	E 79th Street & 5th Ave	SB	SBL	LT	L	56	-	-	-	-	-
			SBT	T	T	576	0.52	24.5	C	127	167
			SBR	TR	R	64	-	-	-	-	-
		EB	EBT	T	T	336	0.53	33.5	C	96	142
			EBR	R	R	105	0.36	32.6	C	57	104
		WB	WBL	L	L	50	0.51	55.2	E	35	68
			WBT	T	T	353	0.36	22.1	C	83	122
		Intersection	Intersection					27.5	C		
18	E 71st Street & York Ave	NB	NBL	LT	L	9	-	-	-	-	-
			NBT	T	T	151	0.14	17.5	B	40	61
			NBR	TR	R	0	-	-	-	-	-
		SB	SBL	LT	L	0	-	-	-	-	-
			SBT	LTR	T	224	0.23	18.6	B	66	95
			SBR	TR	R	31	-	-	-	-	-
		WB	WBL	L	L	76	0.19	26.5	C	49	79
			WBT	TR	T	176	0.53	33.3	C	176	243
			WBR		R	76	-	-	-	-	-
		Intersection	Intersection					24.3	C		

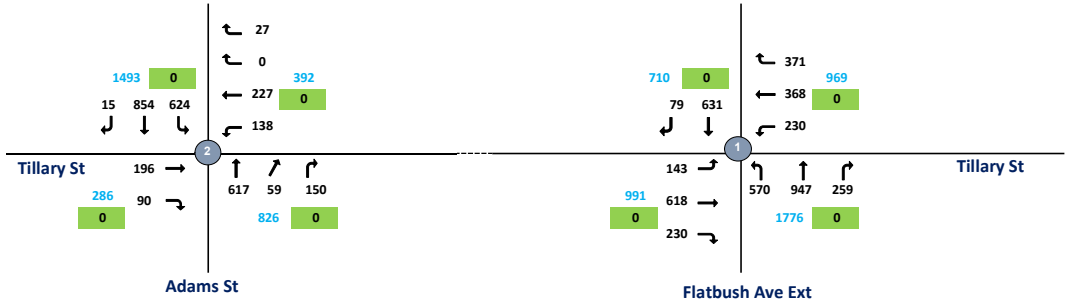
~: the approach is above capacity for the 50th percentile traffic , queue can be longer
#: the volume for the 95th percentile cycle exceeds capacity
m: volume for the 95th percentile queue is metered by an upstream signal

DUMBO **8:00:00 AM**

Intersection	Node	Approach	Total Vehicles Inbound/Outbound AM Peak Hour L2	L	T	R	R2	Total
Tillary St & Flatbush Ave ext								
2019 (TMC-007)	**1**							
Tillary St	1	EB	0	143	618	230	0	
Tillary St	1	WB	0	230	368	371	0	
Flatbush Ave ext	1	NB	0	570	947	259	0	
Flatbush Ave ext	1	SB	0	0	631	79	0	**4446**
Tillary St & Adams St								
2019 (TMC-008)	**2**							
Tillary St	2	EB	0	0	196	90	0	
Tillary St	2	WB	0	138	227	0	27	
Adams St	2	NB	0	0	617	59	150	
Adams St	2	SB	0	624	854	15	0	**2997**
Vine St & Old Fulton Rd								
2019 (TMC-009)	**3**							
Vine St	3	EB	0	0	0	0	0	
Vine St	3	WB	0	0	0	0	0	
Old Fulton Rd	3	NB	0	1139	178	0	0	
Old Fulton Rd	3	SB	0	0	654	0	0	**1971**

CBD Tolling
Dumbo #1- Traffic Flowmap
AM With Action

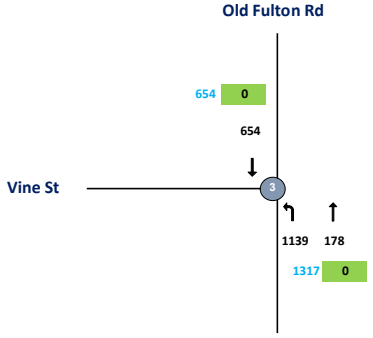
Legend:
- 1 - Intersection (2019 Collected Data)
- 7 - Intersection (Uncollected Data)
- 100 - ATR Volume
- 100 - Approach Volume



Appendix 4B.2-2

CBD Tolling
Dumbo #2 - Traffic Flowmap
AM With Action

Legend:
- 1 - Intersection (2019 Collected Data)
- 7 - Intersection (Uncollected Data)
- 100 - ATR Volume
- 100 - Approach Volume



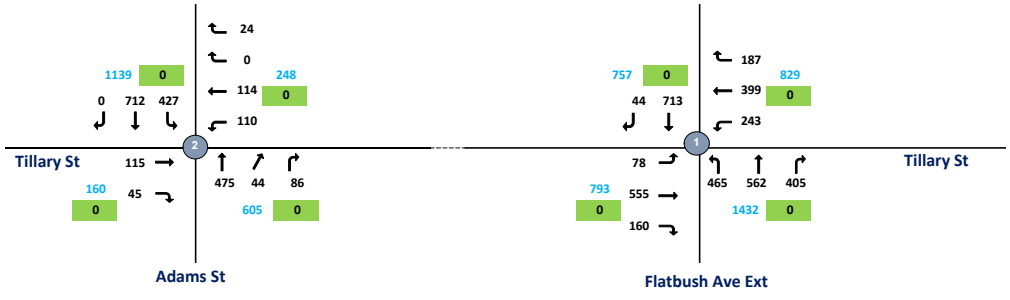
DUMBO **9:00:00 PM**

Intersection	Node	Approach	Total Vehicles Inbound/Outbound LN Peak Hour L2	L	T	R	R2	Total
Tillary St & Flatbush Ave ext								
2019 (TMC-007)	**1**							
Tillary St	1	EB	0	78	555	160	0	
Tillary St	1	WB	0	243	399	187	0	
Flatbush Ave ext	1	NB	0	465	562	405	0	
Flatbush Ave ext	1	SB	0	0	713	44	0	**3811**
Tillary St & Adams St								
2019 (TMC-008)	**2**							
Tillary St	2	EB	0	0	115	45	0	
Tillary St	2	WB	0	110	114	0	24	
Adams St	2	NB	0	0	475	44	86	
Adams St	2	SB	0	427	712	0	0	**2152**
Vine St & Old Fulton Rd								
2019 (TMC-009)	**3**							
Vine St	3	EB	0	0	0	0	0	
Vine St	3	WB	0	0	0	0	0	
Old Fulton Rd	3	NB	0	1265	137	0	0	
Old Fulton Rd	3	SB	0	0	284	0	0	**1686**

CBD Tolling
Dumbo - Traffic Flowmap
LN With Action

N

Legend:
1 - Intersection (2019 Collected Data)
7 - Intersection (Uncollected Data)
100 - ATR Volume
100 - Approach Volume



Appendix 4B.2-5

CBD Tolling
Dumbo #2 - Traffic Flowmap
LN With Action

N

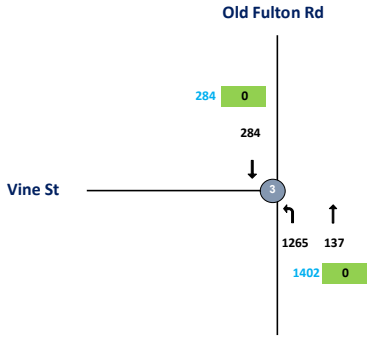
Legend:

1 - Intersection (2019 Collected Data)

7 - Intersection (Uncollected Data)

100 - ATR Volume

100 - Approach Volume

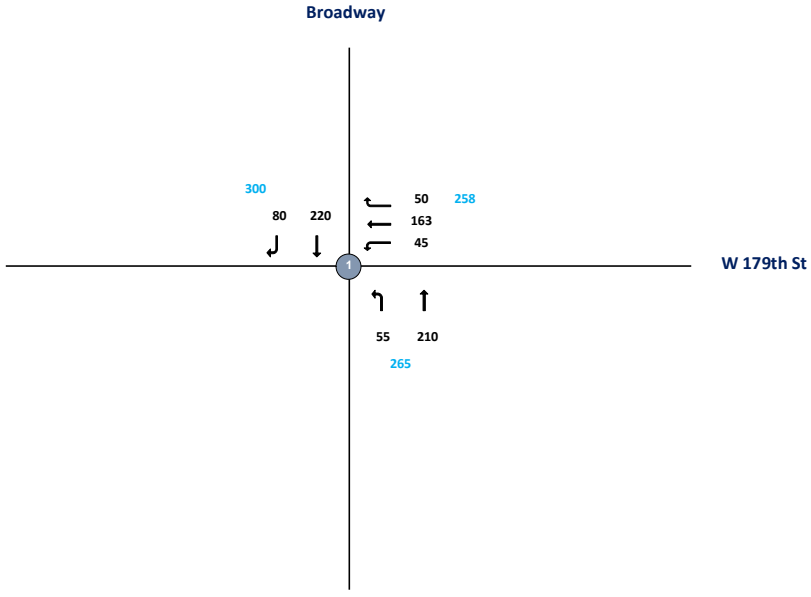


LDR 8:00 AM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound AM Peak Hour L2	L	T	R	R2	Total
Broadway & W 179th								
2021 (LDR-01)	**1**							
W 179th St	1	EB	0	0	0	0	0	
W 179th St	1	WB	0	45	163	50	0	
Broadway	1	NB	0	55	210	0	0	
Broadway	1	SB	0	0	220	80	0	**823**

CBD Tolling
LDR - Traffic Flowmap
AM With-Action

Legend:
1 - Intersection (2019 Collected Data)
7 - Intersection (Uncollected Data)
100 - ATR Volume
100 - Approach Volume



Appendix 4B.2-8

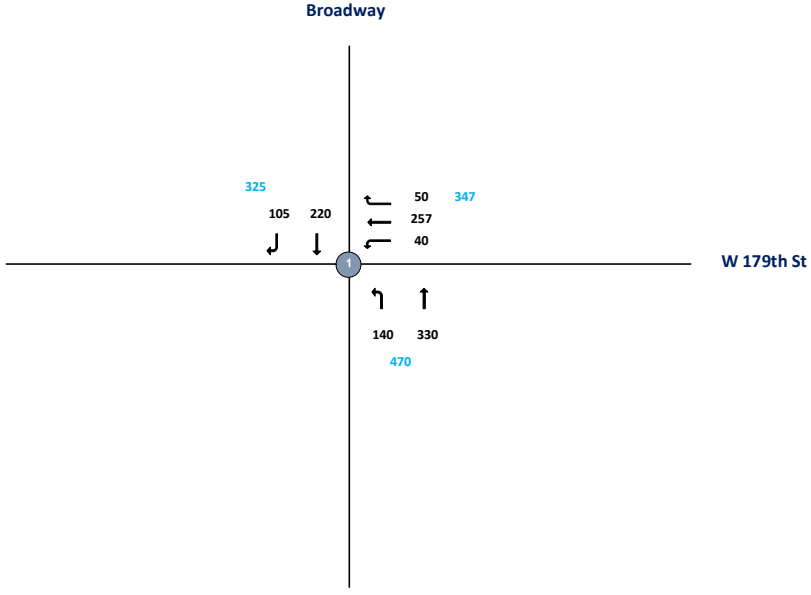
LDR 1:00 PM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound MD Peak Hour L2	L	T	R	R2	Total
Broadway & W 179th								
2021 (LDR-01)	**1**							
W 179th St	1	EB	0	0	0	0	0	
W 179th St	1	WB	0	40	257	50	0	
Broadway	1	NB	0	140	330	0	0	
Broadway	1	SB	0	0	220	105	0	**1142**

CBD Tolling
LDR - Traffic Flowmap
MD With-Action

N

Legend:
1 - Intersection (2019 Collected Data)
7 - Intersection (Uncollected Data)
100 - ATR Volume
100 - Approach Volume



Appendix 4B.2-10

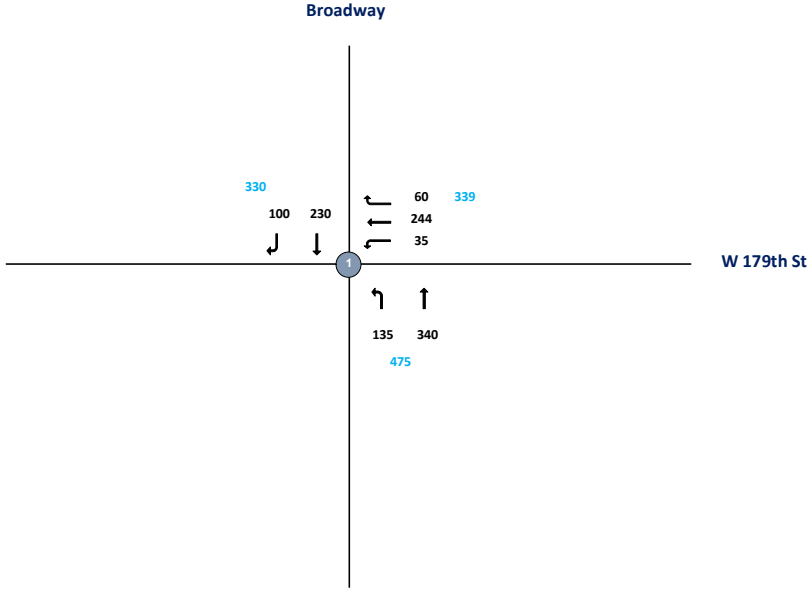
LDR 5:00 PM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound PM Peak Hour L2	L	T	R	R2	Total
Broadway & W 179th								
2021 (LDR-01)	**1**							
W 179th St	1	EB	0	0	0	0	0	
W 179th St	1	WB	0	35	244	60	0	
Broadway	1	NB	0	135	340	0	0	
Broadway	1	SB	0	0	230	100	0	**1144**

CBD Tolling
LDR - Traffic Flowmap
PM With-Action

N

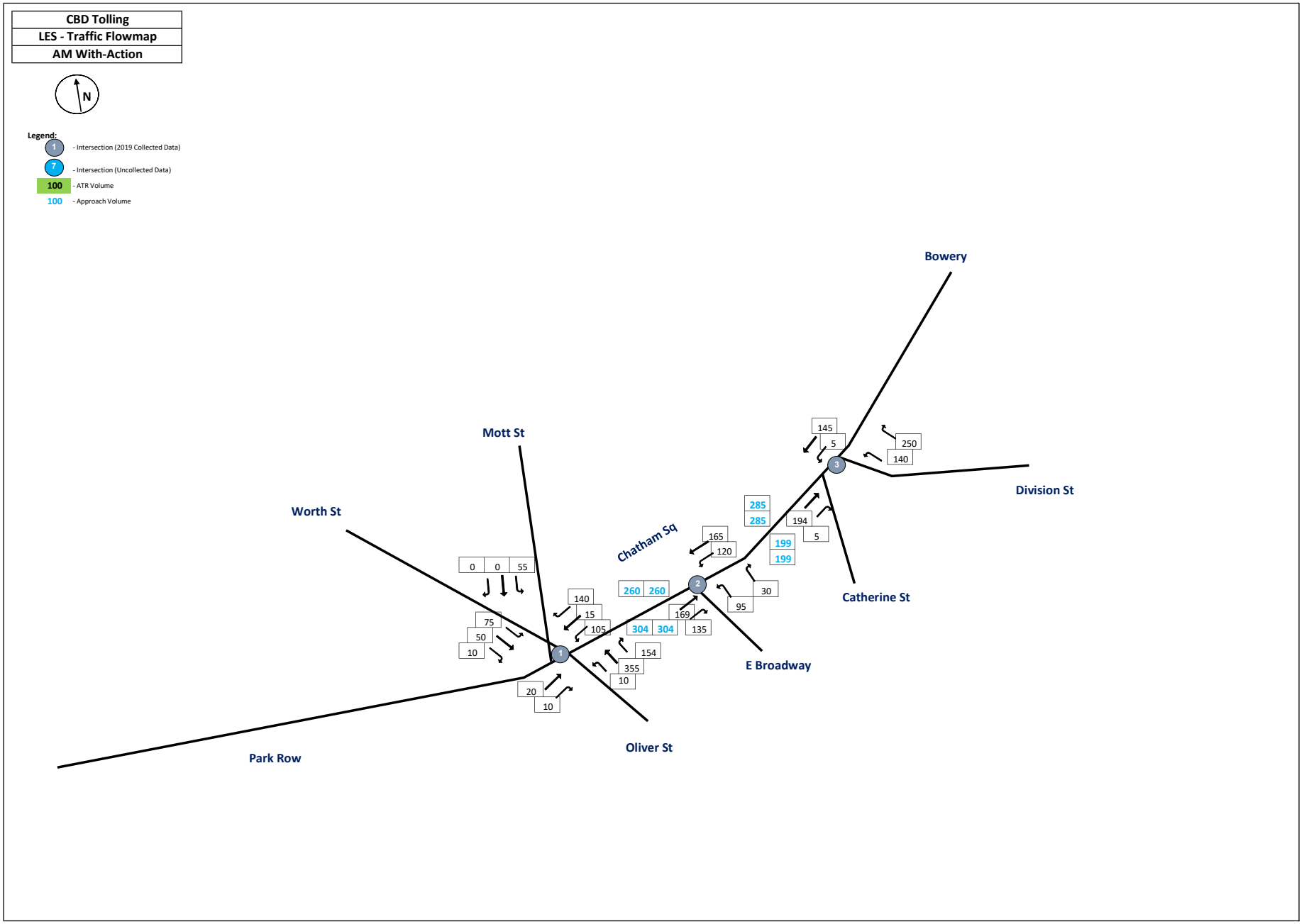
Legend:
1 - Intersection (2019 Collected Data)
7 - Intersection (Uncollected Data)
100 - ATR Volume
100 - Approach Volume



Appendix 4B.2-12

LES 8:00 AM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound AM Peak Hour L2	L	T	R	R2	Total
Worth St/Oliver St/Mott St & Chatham Square/Park Row								
2022 (LES-01)	**1**							
Mott St	1	SW	55	0	0	0	0	
Park Row	1	EB	0	0	20	10	0	
Chatham Sq	1	WB	0	105	15	140	0	
Oliver St	1	NB	0	10	355	0	154	
Worth St	1	SB	0	75	50	10	0	**999**
E Broadway & Chatham Sq								
2022 (LES-02)	**2**							
Chatham Sq	2	EB	0	0	169	135	0	
Chatham Sq	2	WB	0	120	165	0	0	
E Broadway	2	NB	0	95	0	30	0	
	2	SB	0	0	0	0	0	**714**
Division St/Doyers St/Catherine St & Chatham Square/Bowery								
2022 (LES-03)	**3**							
Chatham Sq	3	EB	0	0	194	0	5	
Bowery	3	WB	0	5	145	0	0	
Division St	3	NB	0	140	0	250	0	
	3	SB	0	0	0	0	0	**739**

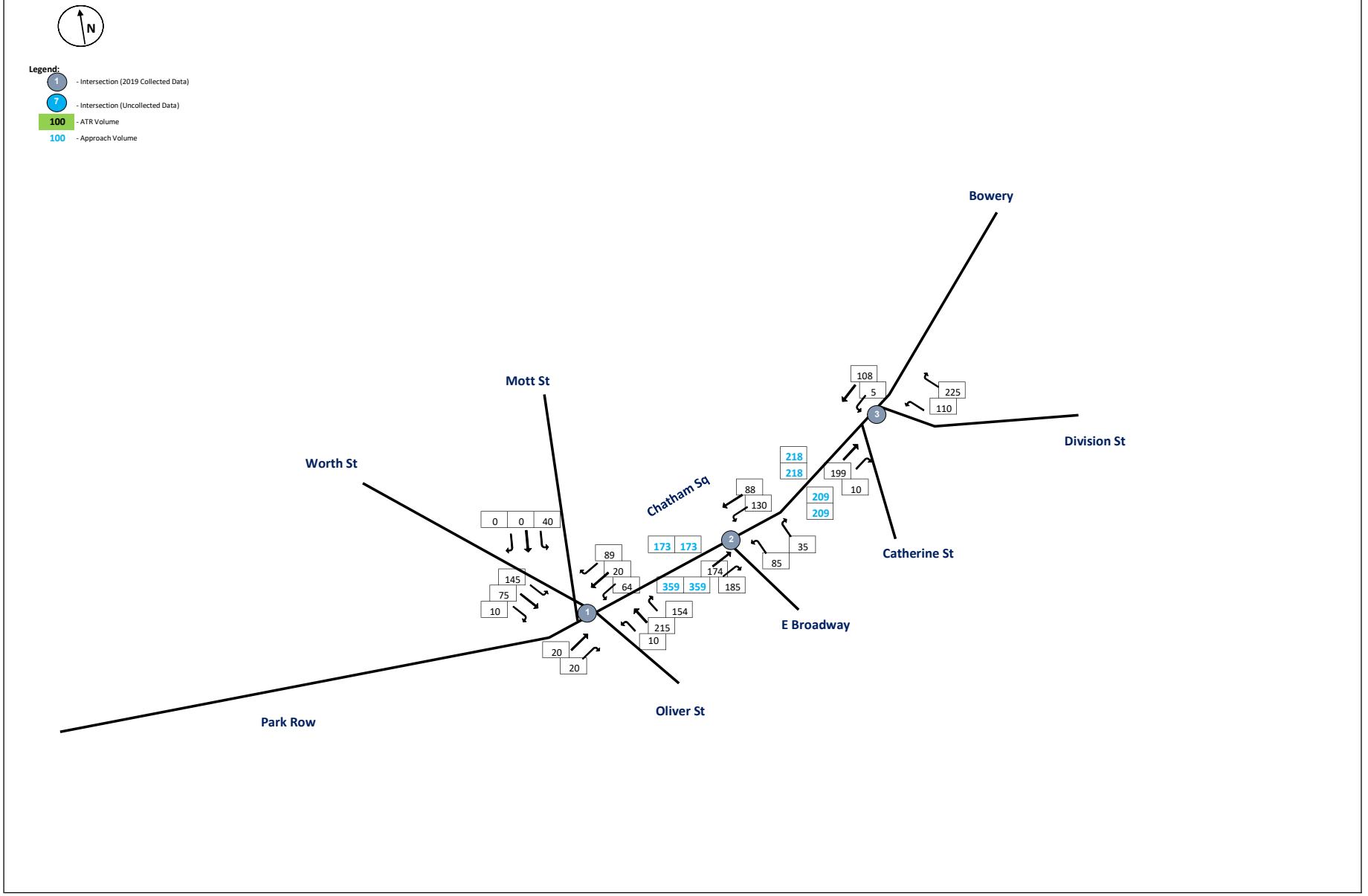


Appendix 4B.2-14

LES 1:00 PM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound MD Peak Hour L2	L	T	R	R2	Total
Worth St/Oliver St/Mott St & Chatham Square/Park Row								
2022 (LES-01)	**1**							
Mott St	1	SW	40	0	0	0	0	
Park Row	1	EB	0	0	20	20	0	
Chatham Sq	1	WB	0	64	20	89	0	
Oliver St	1	NB	0	10	215	0	154	
Worth St	1	SB	0	145	75	10	0	**862**
E Broadway & Chatham Sq								
2022 (LES-02)	**2**							
Chatham Sq	2	EB	0	0	174	185	0	
Chatham Sq	2	WB	0	130	88	0	0	
E Broadway	2	NB	0	85	0	35	0	
	2	SB	0	0	0	0	0	**697**
Division St/Doyers St/Catherine St & Chatham Square/Bowery								
2022 (LES-03)	**3**							
Chatham Sq	3	EB	0	0	199	0	10	
Bowery	3	WB	0	5	108	0	0	
Division St	3	NB	0	110	0	225	0	
	3	SB	0	0	0	0	0	**657**

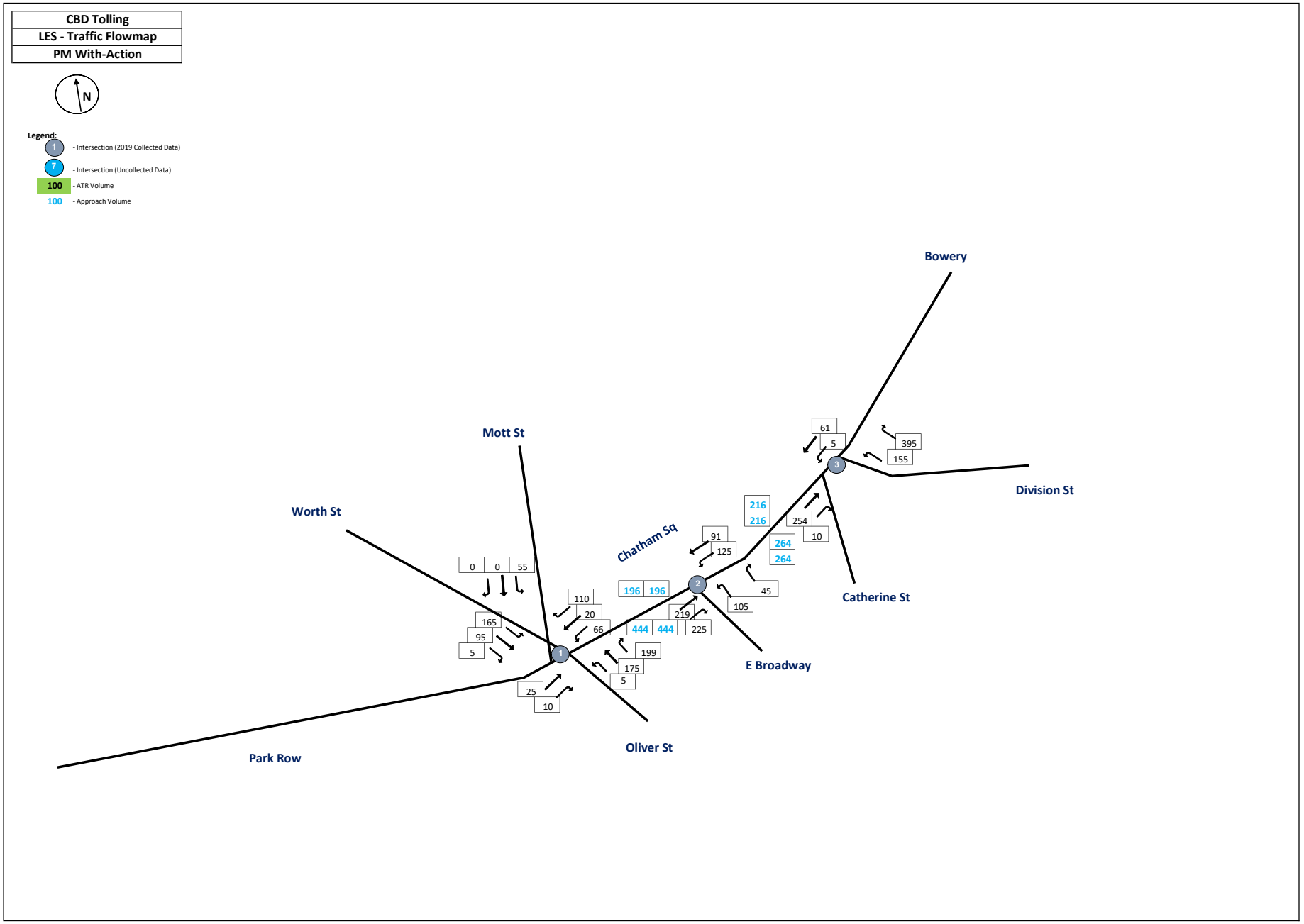
CBD Tolling
LES - Traffic Flowmap
MD No Action



Appendix 4B.2-16

LES 5:00 PM

Intersection	Node	Approach	Total Vehicles Inbound/Outbound PM Peak Hour L2	L	T	R	R2	Total
Worth St/Oliver St/Mott St & Chatham Square/Park Row								
2022 (LES-01)	**1**							
Mott St	1	SW	55	0	0	0	0	
Park Row	1	EB	0	0	25	10	0	
Chatham Sq	1	WB	0	66	20	110	0	
Oliver St	1	NB	0	5	175	0	199	
Worth St	1	SB	0	165	95	5	0	**930**
E Broadway & Chatham Sq								
2022 (LES-02)	**2**							
Chatham Sq	2	EB	0	0	219	225	0	
Chatham Sq	2	WB	0	125	91	0	0	
E Broadway	2	NB	0	105	0	45	0	
	2	SB	0	0	0	0	0	**810**
Division St/Doyers St/Catherine St & Chatham Square/Bowery								
2022 (LES-03)	**3**							
Chatham Sq	3	EB	0	0	254	0	10	
Bowery	3	WB	0	5	61	0	0	
Division St	3	NB	0	155	0	395	0	
	3	SB	0	0	0	0	0	**880**


CBD Tolling
LES - Traffic Flowmap
PM With-Action
N
Legend:
1 - Intersection (2019 Collected Data)
7 - Intersection (Uncollected Data)
100 - ATR Volume
100 - Approach Volume
Bowery
Mott St
Worth St
Chatham Sq
Division St
Catherine St
E Broadway
Oliver St
Park Row
0 0 55
165 95 5
110 20 66
25 10
199 175 5
196 196
444 444
91 125
219 225
105 45
216 216
264 264
254 10
61 5
395 155

LIC **8:00:00 AM**

Intersection	Node	Approach	Total Vehicles Inbound/Outbound AM Peak Hour L2	L	T	R	R2	Total
11th St / Pulaski Brdge & Jackson Ave								
2017 --> 2019 (LIC_1_TMC-6A)	**1**							
Pulaski Bridge / 11th St	1	EB	0	25	55	0	0	
Pulaski Bridge / 11th St	1	WB	0	465	215	0	0	
Jackson Ave	1	NB	0	71	701	406	0	
Jackson Ave	1	SB	0	0	444	64	0	**2446**
11th St / 48th St								
2017 --> 2019 (LIC_1_TMC-6A)	**111**							
11th St	111	EB	0	0	0	0	0	
11th St	111	WB	0	10	25	10	0	
48th St	111	NB	0	65	661	0	0	
48th St	111	SB	0	0	498	15	0	**1284**
Vernon Blvd & 50th Ave								
2019 (TMC-001)	**2**							
50th Ave	2	EB	0	35	64	30	0	
50th Ave	2	WB	0	0	0	0	0	
Vernon Blvd	2	NB	0	0	207	13	0	
Vernon Blvd	2	SB	0	44	163	0	0	**556**
Pulsaki Bridge & Green St								
2019 (TMC-002)	**3**							
Green St	3	EB	0	182	20	40	0	
Green St	3	WB	0	0	0	0	0	
Pulsaki Bridge	3	NB	0	0	1151	30	0	
Pulsaki Btridge	3	SB	0	73	942	0	0	**2438**
Pulsaki Bridge & Freeman St								
2019 (TMC-003)	**4**							
Freeman St	4	EB	0	0	0	0	0	
Freeman St	4	WB	0	0	0	179	0	
Pulsaki Bridge	4	NB	0	0	1333	0	0	
Pulsaki Btridge	4	SB	0	0	1015	115	0	**2642**
49th Ave & 21st St								
2017 --> 2019 (LIC_5_TMC-6C)	**5**							
49th Ave	5	EB	0	36	132	10	0	
49th Ave	5	WB	0	5	40	310	0	
21th Ave	5	NB	0	35	90	40	0	
21th Ave	5	SB	0	98	127	10	0	**933**